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THE ARCHITECTURAL REVIEW VOLUME CXXVII NUMBER 755 JANUARY 1960 FIVE SHILLINGS



plus design features that make it particularly safe and comfortable. Home buyers want the best, that's why you should fit the Bilston Atlanta.



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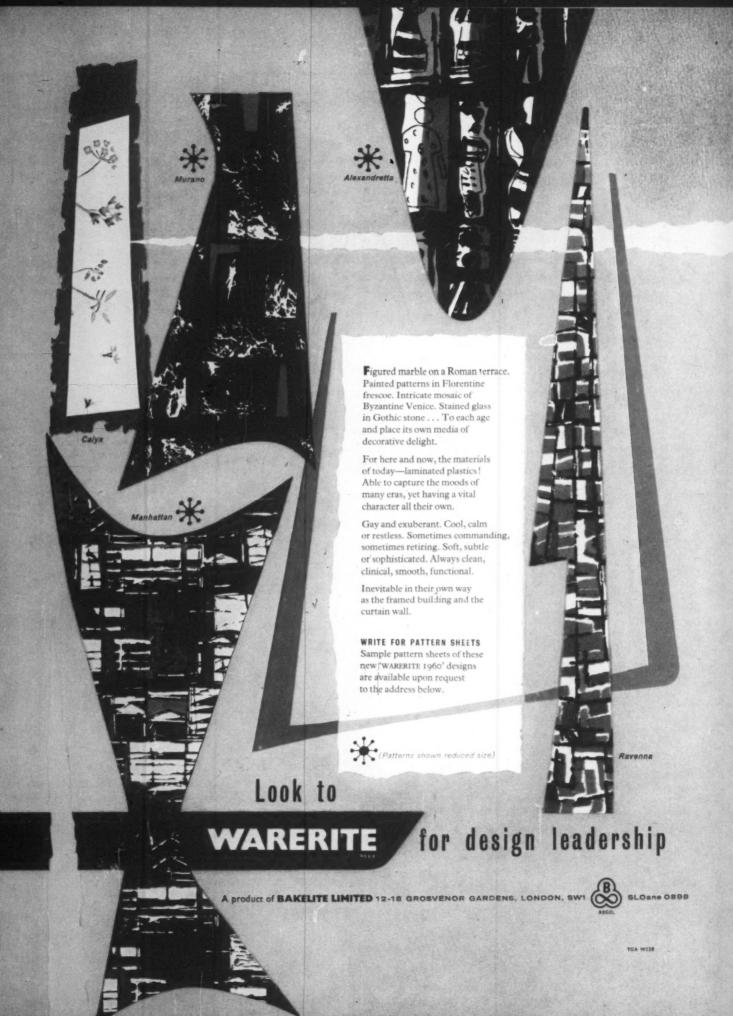
Tops can be fitted centrally, or on either corner to facilitate installation and maintenance.

Fittings. The Atlanta is supplied with or without overflow . . . with or without hand grip. The feet can be adjusted to accommodate all types of trap, including the Bilston 'Wasteflo' prefabricated waste, trap and overflow unit. A iso available with the Bilston O.P. Hand Grip helpful to the elderly or infirm.

Colours. The Bilston range includes white, or the · 'exact colour required for any decorative scheme.

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Photograph of Stanton Type 8G Spun
Concrete Lighting Columns at Epsom,
by courtesy of C. G. Cobbett, Esq., A.M.I.C.E., M.I.Mun.E., Borough Engineer

and Surveyor.

The above type is one of many Stanton designs approved by the Council of Industrial Design and acceptable to the Ministry of Transport for use on trunk roads.

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N.B. These Boards are not suitable for suspended flooring.

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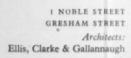
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Architect:
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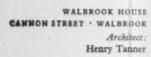




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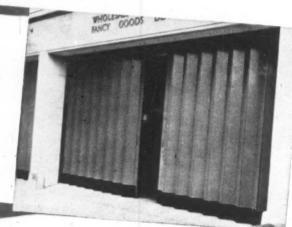
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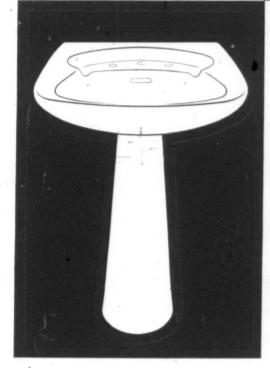
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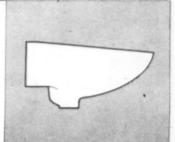
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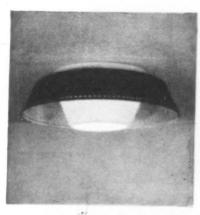
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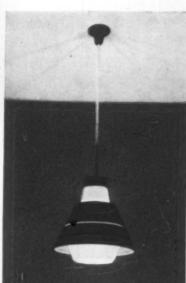
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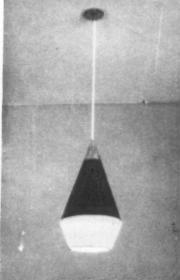
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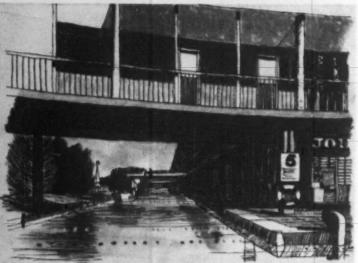
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4P 101







## Motopia

A GLASS AGE DEVELOPMENT COMMITTEE STUDY

## **3**—The varied pattern of the roundabouts.

The 35 roundabouts which link the residential terraces of Motopia have an important part to play in the overall plan.

In the traffic system they link the roof-top main roads to the mews-level access roads, which will have service and filling stations sited in the roundabouts.

The areas within these circles of buildings will be the centre of community life, and will provide settings for travelling theatres, open-air entertainments, public houses, tea shops, clubrooms, nursery schools, and the like.

Provision will be made for some shops, but twenty of the roundabouts will also accommodate open markets.

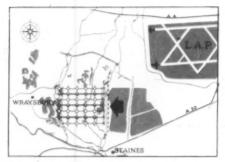
The aim would be to make these areas as attractive, colourful and as varied as possible, and illustrated are an artist's impressions of how this would be achieved.

RIGHT: An open market.

TOP LEFT: One of the fifteen water-bus stops.

MIDDLE LEFT: The view along a canal from a water-bus stop.

LOWER LEFT: A place to relax, with open-air cafe.



Motopia is designed to overcome the unhappy effects of congestion by placing the roads upon continuous terraces, built in great squares which provide accommodation for 30,000 people. This is the fourth post-war study prepared by the Glass Age Development Committee, consisting of Jellicoe, Ballantyne and Coleridge, FAR.I.B.A., Edward D. Mills, F.R.I.B.A. and Ove Arup and Partners, and convened by Pilkington Brothers Limited.

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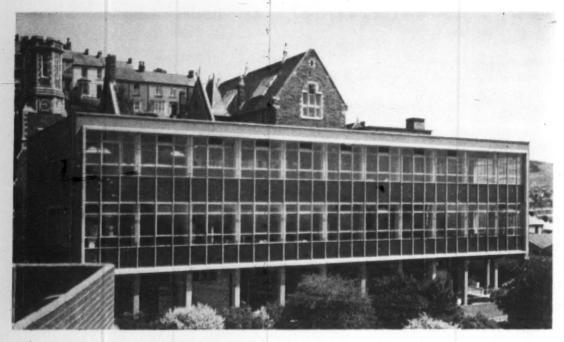
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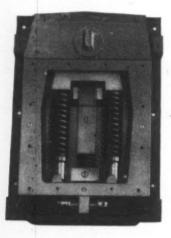
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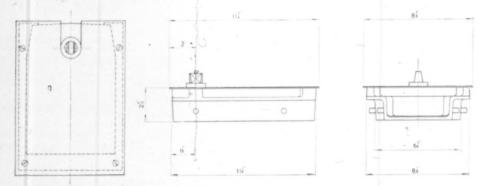
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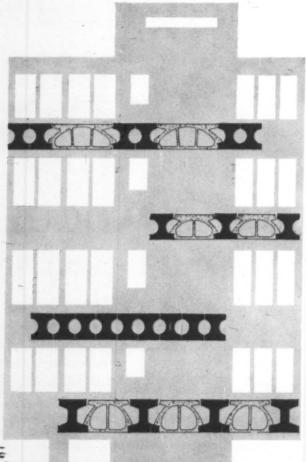
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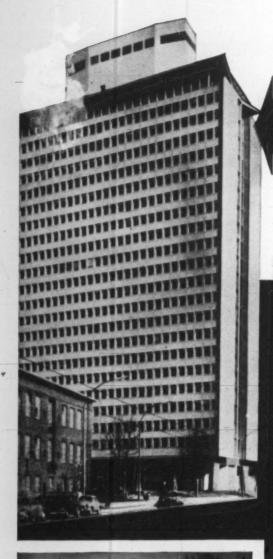
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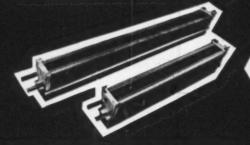
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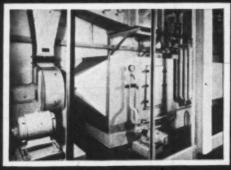
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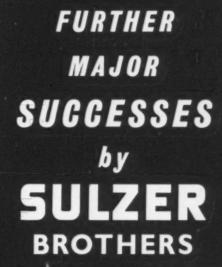
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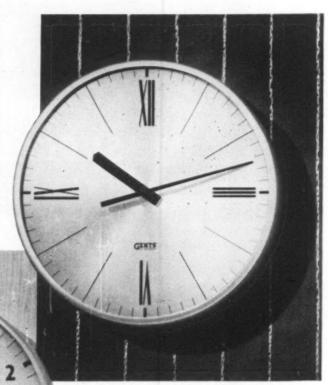
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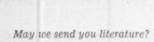
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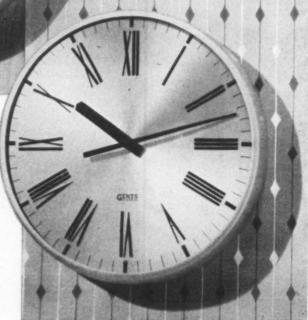
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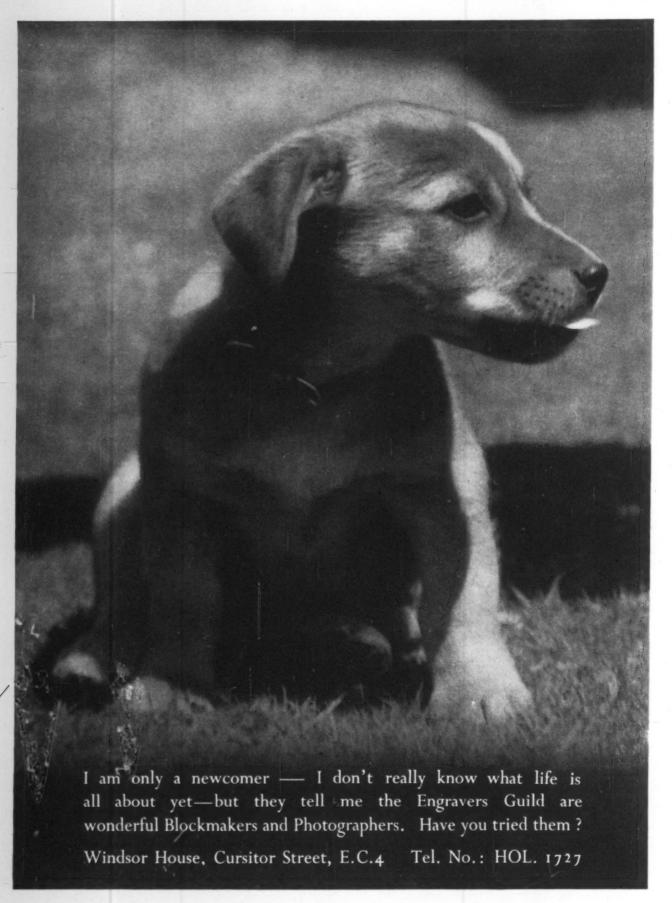
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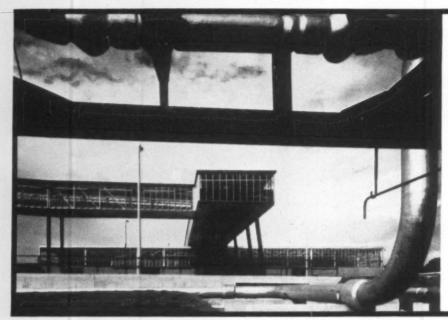
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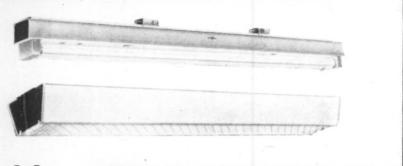
> and the covered footway connecting the two factories.



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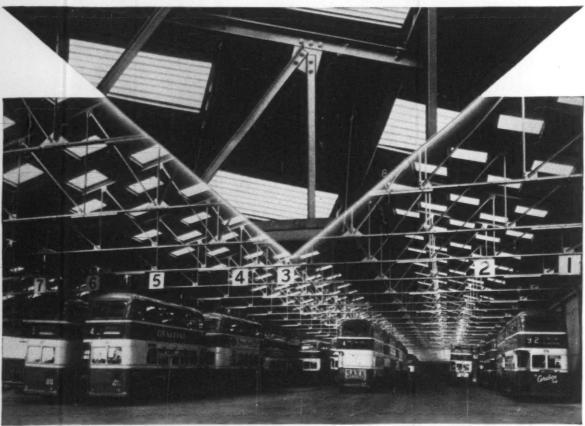


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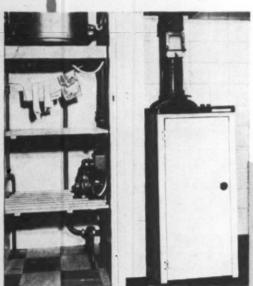
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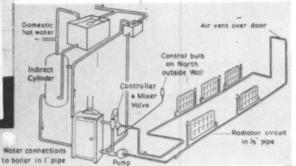
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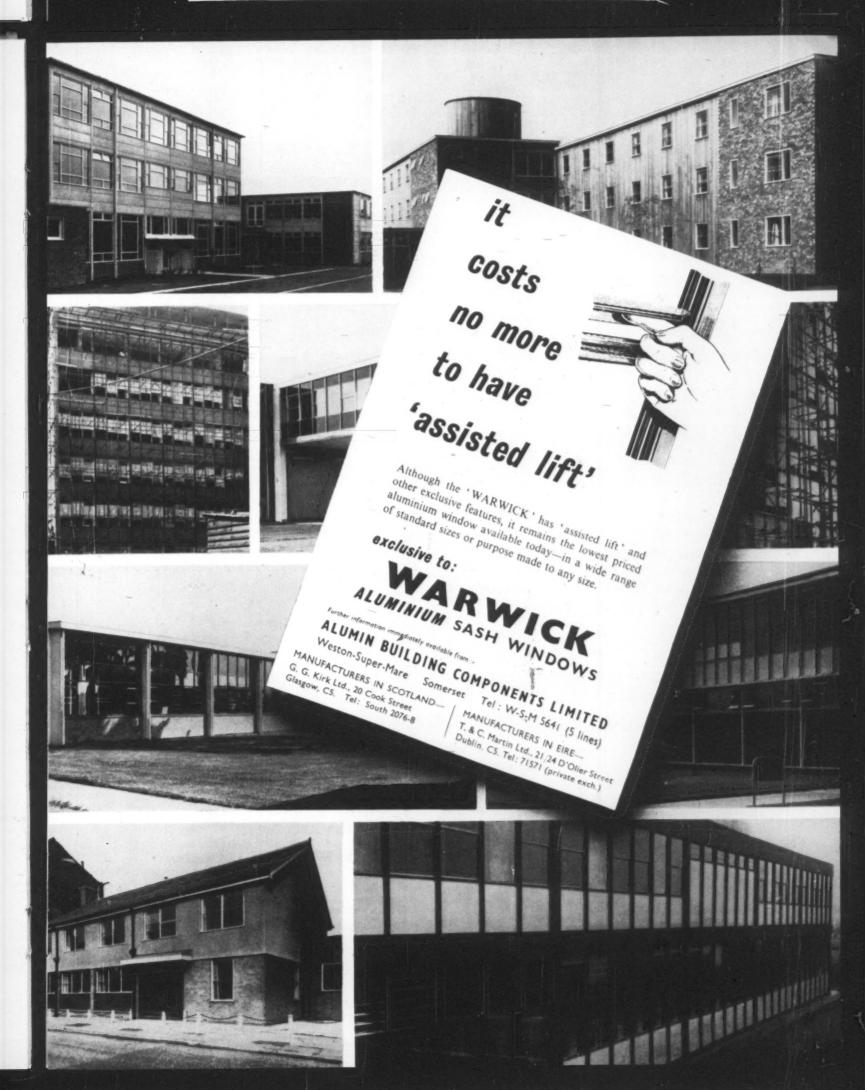
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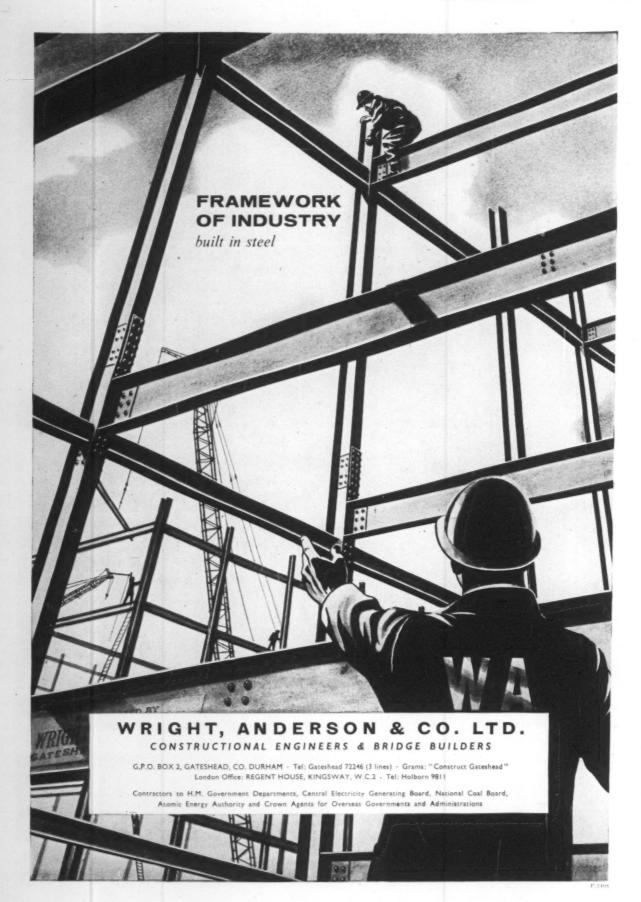
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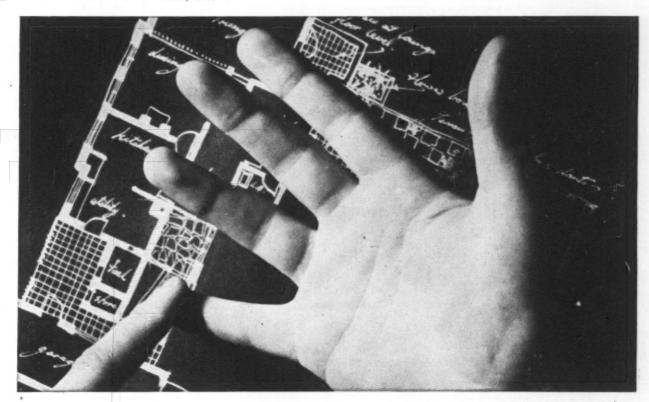
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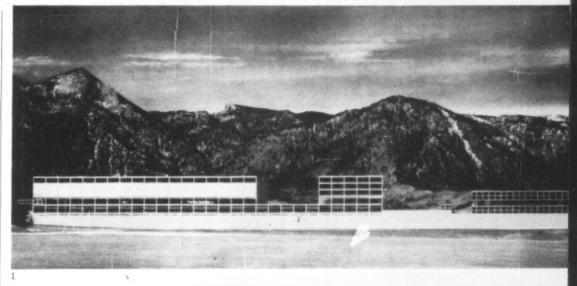
#### Acropolis of Pure Reason

The word 'Acropolis' adheres persistently to, the newly-dedicated US Air Force Academy, 1, not far from Colorado Springs, Major critics and casual visitors alike seem to have found the word rising unbidden in their thoughts. Architecture d'Aujourdhui (85, 1959), having noticed 'the severe modulation, the clearly exhibited structure, the rectangularity of the composition and the balance of the elementary volumes,' finds the Acropolis comparison somewhat osé, but is still prepared to discuss it at length, Certainly in its extreme rationalism and impersonality, 2, Skidmore, Owings and

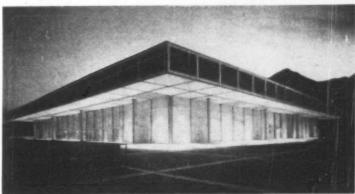


Merrill have achieved an image of those aspects of Greek architecture that the Modern Movement admires, but the Parthenon is only one part of the Aeropolis, and it is on the planning and landscape side that the comparison seems most arguable. What was admired in the Aeropolis by Auguste Choisy, the grand ancestor of Twentieth Century Rationalism, was the subtly picturesque quality of the layout, whereas the planning of the Air Force Academy, 3, is as rigorously orthogonal as its elevations and the relationship to the surrounding landscape, with its heroically-scaled backdrop of mountains, is completely different—though there is, to judge from eye-witness reports, a series of views from the approach road that give a somewhat similar effect to those seen from the Propylaeum.

But, if it is a modern Acropolis,



has it a modern Parthenon? The answer, probably, is Yes-provided reads Parthenon in terms of clarity and single-mindedness of conception, and does not worry too much about masterpiece status. The great dining hall, large enough to accommodate the entire cadet body (eating at Attention) in one sitting simply an uninterrupted square volume, 252 feet each way, capped by a space-frame full of air-conditioning and services nearly ten feet deep, which registers on the outside as a massive cornice of extract-grilles, 4—and that, apart from a central core of kitchens and servery, is literally all there is to it, a volume and a lid, expressed with undis-mayed directness. There have been many expressions of disappointment that (to quote Architectural Record, June, 1959) the buildings are an expression of 'a corporate aesthetic, rather than of an intrinsic purpose,'

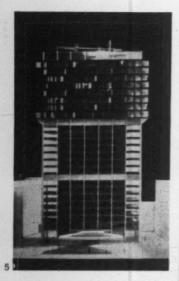


but would critics have been any happier with the version that, say, a Saarinen or a Rudolph might have produced in their present moods?



Apparently stung by the world-wide bewilderment and hostility aroused by their Torre Velasca in Milan, the BBPR partnership have offered in Casabella (232, 1959) a chiarimento of their intentions in the tower, and some more recent works from the office for comparison. As so often happens with such deeply-felt personal statements the confusion is not greatly lessened, but at least there is more material with which to argue. For instance, they produce two documents of quite outstanding interest, in the form of photographs of models of the Torre Velasca designed before their change of heart. Both have the same 'Big Ben' silhouette as the built version, but in detail one is so different, 5, that it could almost be the work of a different office. It may also provide a clue to just where BBPR have deviated significantly from the main-stream of development—compared





with the built version it shows a clearer distinction between the exterior expressions of its two main interior functions (viz., flats and offices), and seems also to give more weight to the mechanical, as against the structural aspects of the building—as evidence the grilles of the service floor immediately under the overhang.

The structural emphasis appears equally in one of the works that BBPR offer in collateral justification of the Torre—a complex development on the Corso Francia in Turin, 6. In spite of their protestations that the aim 'was to interpret the poetic sense of their thematic essence and that of their pre-existent environment' it is difficult to see what the game of hit-and-miss variants on the Chicago triple-light window has to do with the pre-existing environment of Turin, even if the recessed bay-windows a la Mackintosh at mezzanine level have some connection with Torinese Art Nouveau. Elsewhere in the same issue Ernesto Rogers (the 'R' of BBPR) proposes that architecture of this type 'goes beyond the abstract schemes of the 'modern' architectural expression . . . giving a new kind of modernity to architecture.' If this is seriously intended, and these dowdy-looking revivals of late nineteenthecutury architecture are supposed to have 'a new kind of modernity,' then Gillo Dorfles and other semantic critics of the Milanese School have some urgent work to do on the meanings of new and modern.



Art for Art or Diplomacy?

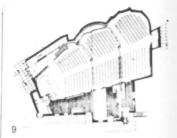
We see here a once truly functional architect losing himself in modern "l'art pour l'art" in a fashionable dressing up of essentially clementary space and form,' wrote J. J. Vriend, one of four critics invited by Boux (30, 1959) to comment on Marcel Breuer's new US embassy building in The Hague. Many English voices would doubtless echo these sentiments when confronted with the building itself, 7, with its trapezoidal windows. But they might enquire further what justifications were offered for this further manifestation of American Diplomatic Formalism. Unlike the attempted 'keeping in keeping' of Saarinen's London Embassy, this design keeps in no visible keeping with, say, the houses in the Lange Voorhout, and even less with the symmetrical Baroque front of the Royal Theatre, which is directly confronted by the asymmetry of the block on the left in 7. Those who acclaimed the early stages of the State Department's reformed building programme, and held it up as an example to other governments, including our own, must now be

wondering what monsters have been fathered on the modern movement by global politics and unlimited budgets.

#### The Vaults of Imatra

If, as Henry-Russell Hitchcock appears to think, architecture is about to enter a Late Roman' phase, in which the exteriors are left to fend for themselves and attention is concentrated on the inner volumes, then we are in for a bad time photographically. Complex interior spaces that do not answer to a simple geometrical figure in plan cannot be rendered in a single photograph, and only a pile of photographic documentation gives any idea to a person who has not experienced the building first hand—case in point, Alvar Aalto's new church at Imatra. The exterior, 8, makes it moderately clear what must be going on, but it is only now that a number of magazines have published their versions of the interior that the pictures begin to add up.

The plan, 9, shows a lay-out in which three asymmetrically scalloped



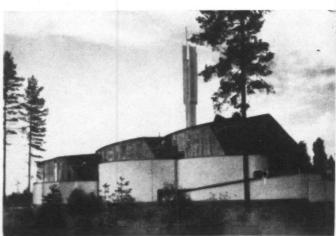
vaults taper down to a flat chancel wall—what time the average roof-line becomes higher. Two sliding doors, travelling in curved tracks, extreme right in 10, make it possible to cut off the two larger, but lower vaulted areas from the chancel, and on the liturgical west (away from the altar) of each door-track lies the secret of



the whole design—a pair of trompes (for want of a better word) that fill the space, 11, between the curved









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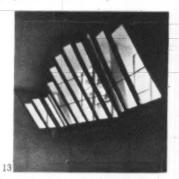


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portal from door and the square which the next vault springs, 12. The unphotographable confusion that results is deepened by the way in which the inner, false windows, 13, are canted inwards and—in the case of the middle yault, rise from a differently shaped plan to that of the vertical exterior window, 14.

Having said so much, one can only join in the chorus of praise that has





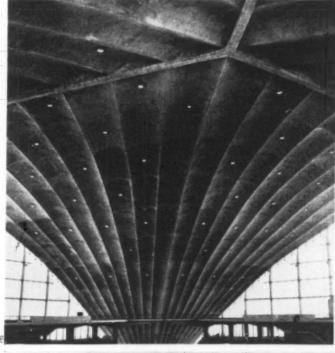
greeted this subtle and extraordinary work of the great Finnish master

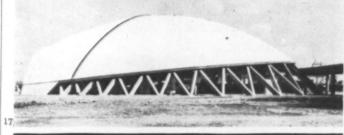
—Zadiac (3, 1959) pronounced that
'Aalto here stands at the height of
his skill, and handles the volume of space with organic freedom,' Casabella (230, 1959), speaking with the voice of Leonardo Mosso, that in this threefold composition of the Imatra church the space is not so much flowing as in growing tension . . . One is tempted to say that this Aalto's most advanced work, and Werk (8, 1959) alone in drawing an analogy from the waves of the sea, felt that the vaults 'seem to rise and flow back as they converge toward the altar.

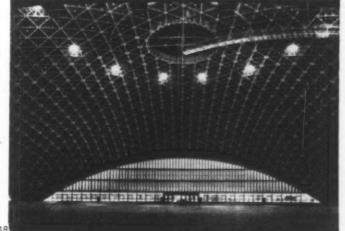
#### Great Exhibition Domes

CNIT is—at last—completed; having first been noted in these columns as long ago as July, 1956. Although Nerv's name has disappeared from the credits (Camelot, Zehrfuss, de Mailly and Prouvé remain), this great exhibition hall by the Rondzeint de la Defense in the wastern point de la Défense in the western suburbs of Paris, still bears a strong resemblance, 15, to the project as he left it. The exteriors, which consist of little more than the glazing in of three huge lunettes, are—like all large areas of glass—variably successful according to the fall of light, but the interior, though difficult to scale









by eye, is stunning, 16, and suggests that French designers are still capable of recapturing the unassailed mastery of exhibition structures that enabled them to produce the Eiffel Tower and

the Galérie des Machines.

But now they have competition.

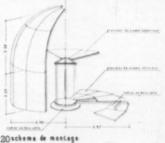
The tilted dome, 17, of the Tokyo international trade centre, designed by Masachika Murata with Yoshiby Masachika Murata with Yoshi-katsu Tsuboi as structural engineer, is only one-sixth the size (10,798 square metres as against over 100,000 for CNIT) but the ambition 100,000 for CNIT) but the ambition behind it is clearly comparable, as is the building's function. The interior is a good deal simpler for the eye to handle—the pattern of the repeating truss-work (which is not, in fact, geodesic in its geometry) is given scale by the ingenious rotating catwalk, 18, which moves on rails to give access to the entire under-surface of the dome for cleaning and surface of the done for cleaning and servicing. This impressive done is No. 2 of a sequence of buildings for the exhibition centre, which will eventually comprise six halls as well as the usual ancillary buildings and an outdoor exhibition space, and the halls of foreign countries Welton Becket's US pavilion is now nearing completion.

#### To the Greenland Station

The radical project by Victor Bodiansky and the ATBAT office for lightweight expedition-huts to serve ingineering to serve the French Antarctic Geophysical Year base was illustrated in AR, September, 1956. Unexecuted, it remains a monument of frustrated ingenuity, but its example has not gone by default, and the same team have now designed a simplified ver-sion, 19, in plastic sandwich-panel construction for use as an over-wintering base for the French re-search-team on the Greenland icecap, and one has already been parachuted into position. The method of assembly is shown in 20, the lower floor having work-spaces and com-munal areas distributed peripherally



around the walls, with a cooking core in the centre, while the domed upper part has six cabins for domed upper part has six cashs for sleep and study, plus two instrument rooms, arranged radially around a central landing, to which access is gained by the lightweight spiral stair seen in 21. This view also gives some





idea of the bolted assembly of the idea of the botted assembly of the panels and the massive double catches on the door which will be needed to secure it against the weather—even so, this will, in service, be only the outer door of a two-door air-lock.

Where this scheme differs most from the Antarctic version is in not having the central post construction and ingenious point-and-guy founda-tions, being envisaged from the start as a stressed-skin construction capable of being set down on a more-or-less level snow surface, rather than the rocky terrain anticipated in Antarctica.









#### The Erskines Have Landed!

The words 'Science-Fiction Dome' normally summon to architectural minds the image of a Buckminster Fuller construction, but for an astonishingly accurate (and surely not entirely coincidental) example of the image it might summon in the minds of SF-readers, we can now turn to Ralph Erskine's recently-designed country-house at Lison, 23, in Sweden, with its segmental dome form and mysterious projecting 'antennae' and 'bug eyes,' 24, the antennae and bug eyes, 24, the whole painted a lichen grey, like the surrounding rocks, as if visiting aliens, having landed, were trying to camouflage their base. The reasons for the low, domical shape are as functional as those for the shape of the French Greenland hut (see 19) and for the same reason-protection against an extreme climate. The structure, however, not needing to be air-transported, is relatively massive,

being of sheet steel.

Having commented on the extreme functionalism of the design of the building envelope, and the treatment of the garden as a terrain-sculpture, the Swedish magazine Arkitektur (8, 1959) observes that 'in the controlled air conditions under this vault the living space has been planned with constructive and functional freedom,' and it is, indeed, remarkable how the interiors, 25, of this tightly disciplined dome reveal the romantic, sculptural, liberated space-composition familiar from Erskine's earlier and more loosely composed buildings; even Erskine's familiar freestanding fireplaces and 'wandering' chimneys are present, 26. In this, and various other schemes recently proposed (mostly by engineers), the possibility begins to emerge that in buildings in which the envelope is effectively predetermined by the use of some form of vault, the interior may prove to be more free and functional in its spatial planning than those in which the functional spaces are predeter-mined and the envelope is supposed to\_result from their most efficient assembly. This, should it prove true, will be a reversal of the expected quite as strange as any in science fiction.

Pirelli Completed 1959's big four European scrapers were one nearer completion as December began. With Phonix-Rheinrohr still to come, the Pirelli tower joined the Torre Galfa in Milan and Mannesmann in Dusseldorf (World, AR, November, 1959) among those safely and impressively out of their seaffolding, 22. Since the completed tower will be much admired, thought about, and discussed, it might be as well here to re-establish the distribution of credit for its design, which has tended too often (even in the pages of the ARCHITECTURAL REVIEW) to be given exclusively to Gio Ponti and Pierluigi Nervi. The responsibility for its design should go to two design offices—those of Gio Ponti, Antonio Fornaroli and Alberto Rosselli; and of Giuseppe Valtolino and Egidio dell'Orto-and to two structural consultants—Pierluigi Nervi and Arturo Danuso. Clearly, the credit

for so remarkable a building will be a matter of consequence to all those who participated in its design, and the Architectural Review wishes to apologize to those who have, on occasions, been omitted.

For the Pirelli building is a remarkable achievement-a fact which may have been somewhat obscured by energetic publicity campaign which has been pointing out, for some four years now, and in a variety of languages, what a remarkable achievement the Pirelli Tower was going to be. It is the measure of the remarkableness of the achievement that the finished building appears to live up to the advance publicity with unqualified success. What now remains to be seen is the extent to which performance measures up to promise—how well the office-module serves office use, and the behaviour of the special curtain-walling and air-conditioning arrangements under Milan's rather taxing climatic conditions.

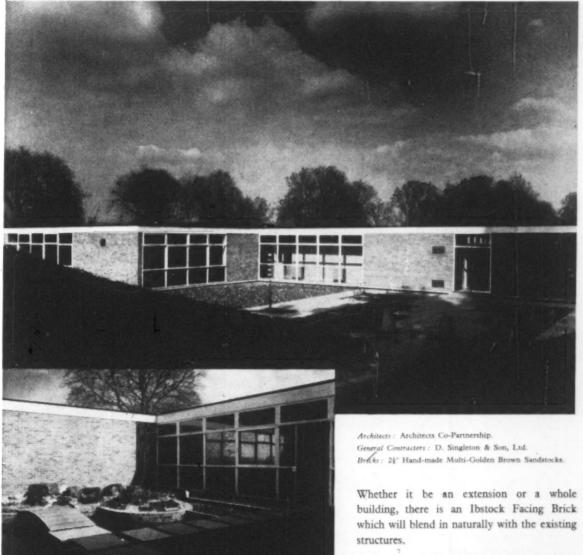
#### Video Tower

Truth is stranger than fiction. Science is persistently stranger than art—even art that claims to be scientific. Some time ago there was exhibited in Paris, at the International Building and Public Works exhibition of 1955, a Cybernetic Tower—a lattice mast with projecting metal vanes that was intended to



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were used for the new Science Extension at Bryanston School, Dorset



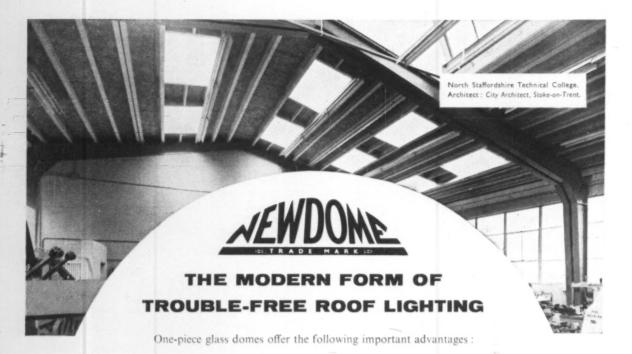
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be not only a work of art in its own right, but also to transmute sunlight and wind-pressure, electronically, into a species of Acolian music. Four years later, the Swedes proudly announce that, to distribute TV and FM transmissions over a large area of Southern Sweden, they have built the tallest lattice tower in Europe, just on 1,000 feet high. Since this is concerned with communicating systems, it too has a claim to be considered as a cybernetic tower, and when it is seen, 27, it proves to be very like the Nicholas Schoeffer version in Paris, although the closer-packed antennae of the Horby TV tower make a far more forceful visual image. The chance of influence from Paris on Horby can be ruled out—this must just be one of those coincidences which a well-run Zeitgeist is bound to produce even under conditions where communications are so good as to threaten to short-circuit it.

#### BOOK REVIEWS

I CARATTERI DISTRIBUTIVI DEGLI ANTICHI EDIFICI. By Pagio Chiolini. Milan. U. Hoepli. Price 46s.

This is a curious book devised maybe for students of architecture or made up from lectures for such students (the author is a lecturer at the Milan Polytechnic). It is illustrated entirely by line-drawings—224 of them—mostly plans with a few sections and elevations and occasionally, charmingly done, exterior and interior views.

The title is curious too, it means

The title is curious too, it means 'The Planning of Ancient Buildings,' but that is not what it offers. There are limitations in time as well as space. If ancient is meant to apply to Antiquity, then Greece and the Orient are missing and we ought to be told; for as soon as we know that Antiquity is represented solely by Rome, we have no further grievance.

In addition to Rome the book deals with the whole of the Middle Ages but the really disturbing fact is that the author's ancient buildings are almost exclusively Italian. Yet you can obviously not discuss for in-stance the types of Roman villas without Hagia Sophia and the basilicas of Asia Minor, Syria and North Africa. As it is, alternation of supports, west apses, and the problem of nave-vaulting and domes do not appear. For the latter we could, of course, have been introduced to S. Salvatore at Spoleto, but perhaps Professor Chiolini does not believe in the early date of the dome there. His choice of Romanesque and Gothic architecture is affected by the fact that Italy was then no longer a donor of styles but a recipient. So the sential innovations such as ambulatories with radiating chapels, and again the whole problem of vaulting, are merely touched upon, and the equally important problem of west towers, west transepts, 'westworks,' etc., is not mentioned. The treatment, incidentally, is consistently typological, not historical. The author enumerates planning varieties but does not follow them from start to spread. The stress is everywhere on function, so the book is at its most valuable in the treatment of less familiar types of buildings, Roman granaries and meat markets, medieval town halls, the medieval naval dockyards of Pisa and Venice, etc. The blocks of flats in Venice and their amazingly intricate staircase arrangements are unfortunately not included (see AR 107, 1950). The book is excellently produced but it has no index and little use has been made of literature of the last ten or twenty years.

N. Pevsner

SIX GREAT ARCHITECTS. By Robert Lutyens. Hamish Hamilton, 12s. 6d,

In these days of standardization, one is so used to reading the same ready-made opinions expressed in slightly different words, that it is very refreshing to read Robert Lutyens's six essays. Whether one agrees with him or not, he has at any rate opinions of his own and no hesitation in stating them. His basic approach to architecture is unorthodox by 'contemporary' standards, but he gives good reasons for holding the views he does.

for holding the views he does.

The book is obviously aimed at an amateur reader but, as historians, the majority of architects may be classed as amateurs. Many will read it with profit and enjoyment, and will be fascinated by the son's-eye view of Edwin Lutyens, even if they find the author's views on other architects irritating or unimportant. The reader

who already has some architectural background can judge for himself how far he is prepared to accept Lutyens's views, but to one who has never heard the other side of the case, this book may well be somewhat misleading and, quite apart from matters of opinion, there are certain inaccuracies or deviations from generally accepted fact and from customary spelling of proper names, such as 'Vetruvius' and 'Nostal Priory.' There are also a number of printing errors, for example: Robert Adam's patroness—the eccentric Countess Hume—appears as 'Countess Howe.'

HABITATION 2. Edited by J. H. van den Broek. Elsevier Publishing Co. (On behalf of Bouwcentrum, Rotterdam and UCA). 95s.

The second part of the threeworld housing study of volume initiated by the International Union of Architects (using the Bouw-centrum and the architecture department at Delft to handle the documentation) covers four European countries with established reputations in the field of housingmark, Sweden, Switzerland and the UK—one with some spectacular individual structures—France—and two that are virtually unknown territory for diverse reasons— Belgium and Czechoslovakia. The Scandinavian and British coverage contains :no surprises, the Swiss includes one or two housing schemes that are not so well known, the French has surprisingly little to set alongside Le Corbusier's Unités, but gives some idea of the housing work of the late André Sive, and of the scope of the HLM programme. Conversely, the oft-heard jibe

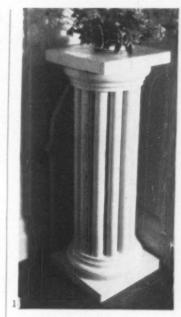
There's no modern architecture Belgium' proves to be in need of revision, for Habitation 2 illustrates schemes that are highly competitive by European standards, as well as some very banal ones whose interest is primarily statistical. The picture of Czechoslovakian housing that emerges is one of extraordinary variety—cottage developments in easant-style, small blocks in almost the Italian neo-traditional manner. Stalin and post-Stalin 'realism,' a tower-scheme of Perret-like regucrity and one unmistakably modern development at Litvinov, a multiwing block whose symmetry and facades recall the work of Tecton. It is in the Czech section, also, that the only substantial or interesting on standardization are be found—elsewhere, one suspects (after reading between the lines of the French entry under this head) that the subject has been played down because architects are not much involved in it. Even for these marginal matters, *Habitation* 2 is of interest, but its overwhelming recommendation is the sheer bulk of clearly tabulated information it brings together for comparison and study.

Q.S.C.

#### MARGINALIA

#### Cast Iron Classicism

Much has been said and written about the classical contribution to the Functional Tradition, and a reassuringly domestic footnote to the debate has been provided by a Victorian cast-iron radiator, 1, which has just been put back into commission at the Avonmouth Hotel in Mudeford, on Christchurch Harbour—connoisseurs of the tenacity of classical traditions will note how the Doric form remains persistently



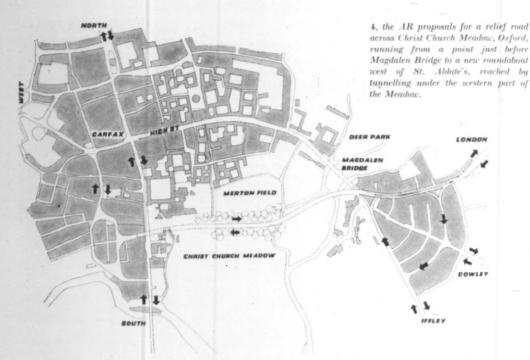
convincing, in spite of the way in which the heating tubes turn the flutings inside-out, so to speak. Mudeford also boasts another

Mudeford also boasts another monument of cast-iron classicism, 2, a letterbox whose purely Dorie form will do much to explain to younger generations, who rarely have a chance to see this type today, why the common GPO posting box is mysteriously referred to as a 'Pillar-box.'



#### Motorway Signs

Since it seems to be generally admitted that the experimental route-signs in use on the Preston by-pass, and intended for other British motorways as well, are an immense improvement on previous standard signs of this type, it is hardly an opportune moment for the Council of Industrial Design's magazine Design to start rocking the boat by making space available for detail quibbling about the sizes of the signs, the use of upper and lower case letters, serifs versus sanserifs, and so forth. The signs actually reproduced by Design to illustrate the argument represent so closely the type of visible signal that enlightened interests have been



campaigning for over many years, and confirm those interests' campaign so fully by the improved legibility they offer, 3, that one would have thought that here was just the sort of case of Officialdom Improved that the CoID was founded to nourish and sustain.

The worst feature of the 'debate' is that both sides—for and against the new signs—are manipulating the same experimental results in support of their cases, together with a fair amount of mild rhetoric, but the experiments in question have nothing to do with this particular set of signs or even with English conditions. Practically everyone involved in the affair is quoted as saying that more research is needed—would it not have been better to wait until there were come incontrovertible results from field tests (one of which would have been to give



the new signs a fair trial without first undermining public confidence in them) and then proceed on a basis of facts rather than of intra-professional typographical polemic?

#### Oxford Relieved-The Figures

Polemics first, facts afterwards; the customary and frustrating pattern of public debate has run its course once more, this time in connection with the various schemes for the relief of traffic in central Oxford, but the outcome, for once, is promising. The Road Research Laboratory has now published the results of its survey of Oxford traffic movements, and the figures fully support the proposals made by the Architectural Review as long ago

as May, 1956. The AR proposal was for an inner relief road across and partly under Christ Church Meadow, its use made more or less mandatory by the closing of Magdalen Bridge (see map, 4), and supported by suitable outer relief roads to draw off purely arterial traffic from the

The Road Research Laboratory's figures which were published at a melancholy moment, not long before the death of Lawrence Dale, who first proposed a radical solution to Oxford's traffic problems—these figures show that an inner relief road across the Meadow would reduce traffic in the High (the main object of all the schemes under discussion) by eighty-four per cent, even without closing Magdalen Bridge. With the bridge closed, the reduction would be of the order of ninety-four per cent. The statistical evidence in favour of the Meadow road thus seems invincible, and the largest of the political blocs on the City Council is committed to its construction. It appears to be only Whitehall that is holding up the scheme now. As an Oxford correspondent of the Cambridge Review wrote recently (10 October, 1959) 'It was Macmillan, H. (Balliol) who allowed the new Woolworth's to build despite the City's refusal of consent, thus making the City centre the great magnet for local shoppers and it is the same man who appears to be delaying any Whitehall decision on what road should be approved. . . .

#### Most Ancient Monuments, II

The much-publicized, and much discussed, archaeological discoveries made at Stonehenge over the last half decade, and culminating during last year's repairs and partial restoration (AR, November, 1959), have now, with commendable promptness, been incorporated in a popular guidebook, written by Professor R. J. C. Atkinson for HMSO (three shillings). The guide covers Avebury, as well as Stonehenge, and all the associated monuments in the vicinity of both. In consequence it has to cover a variety of wooden circles as well as stone ones, barrows and artificial hills—including Silbury, the largest in Europe—avenues and ditches, and ends up as an uncommonly useful

general pocket-book on Neolithic and Early Bronze Age monuments in Britain.

The text is conscientiously unsensational, even going out of its way to debunk the supposed Druidical connections of the monuments, and sticking resolutely to the ascertainable facts (though one would like some more evidence for the up-and-down career of the bluestones at Stonehenge). The photographs are excellent and informative, as are the diagrams, but the 'imaginative reconstructions' of the monuments, their construction and use, are so full of wild Gothic Drama and windswept twilight that one wonders to whom the Stationery Office are trying to sell the film rights.

#### OBITUARY

#### Sir Ambrose Heal: 1872-1959

Not many men alive in 1959 could claim to have been members of the Art Workers' Guild in William Morris's lifetime; any scholar could have been proud to have written The English Writing Masters, or London Furniture Makers; any de-London Furniture Makers; any designer would have been proud of Sir Ambrose Heal's collection of medals, awards and honours. Yet it is less for these things that he will be remembered than as the man who broke the ingrained conservatism and bad taste of the Tottenham Court Road, His life, even more than Sir Gordon Russell's, spans the history of the modern movement in design from the age of the pioneers. to the age of the mass-acceptance of 'contemporary'—and he had a very large part to play in this revolution. Early in his career he inherited some of Åshbee's craftsmen when the Guild of Handicrafts moved out to the Cotswolds; with them he set out to introduce a more straightforward and functional kind of design in wooden furniture, not only for his own satisfaction and the delight of a select band of connoisseurs but also, through the old established family bed-making business, for the use of a wider public.

The expansion of the ofd business into a place where enlightened consumers could find the whole range of domestic furniture and equipment, none of it below a decent minimum standard (and much was very good by international standards) of workmanship, performance and taste, did not at first achieve any notable success, but simply by always being there, and never lowering its standards, it eventually became one of the solid bases on which the changed British attitude to domestic design was founded. When Sir Ambrose died on November 15, at the great age of 87, he had lived through, and largely produced, the change-over from handicraft to messproduction that made 'Art for All' a little less of a slogan and a little more of a reality.

#### H. O. Dell

The death took place on November 1 of Oliver Dell, the photographer, who with his partner H. L. Wainwright, was for many years, up to the end of the last war when he retired, official photographer to the architectural review. During the ninteen-thirties especially the names of Dell and Wainwright were synonymous with the best photographic representation of modern architecture. Architects, as well as the review, owe them a great deal for the skill and artistry with which they interpreted the qualities of modern buildings in England to the whole world.

#### INTELLIGENCE

The Minister for Local Government of the Republic of Ireland has approved the appointment of Mr. Daithi P. Hanley as Dublin City Architect, a new post created by the amalgamation of the offices of city architect and housing architect. Before his appointment Mr. Hanley was the Dublin Housing Architect, and previously he was Housing and Town Planning Architect to Dunlaoghaire.

#### ACKNOWLEDGMENTS

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#### THE ARCHITECTURAL REVIEW



The cover shows the proposed western elevation of a project for an hotel at the corner of Park Lane and Brick Street, London. The architect is Vivien Pilley, and the scheme is further described on p. 54 of this issue, but the project has the additional interest-over and above its qualities as architecture-that it is the first of a number of proposals for hotels around the boundary of Hyde Park to be given the goahead, after the recent town-planning controversies over the siting of tall blocks in that area. In this case the hotel does not directly overlook the Park, but sees it across the northern end of Hamilton Place.

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Volume 127 . Number 755 January 1960

#### SPECIAL PREVIEW

- I World
- 5 Book Reviews and Marginalia
- 8 Frontispiece
- 9 Architecture After 1960

#### # University Buildings

- 11 Natural Philosophy Building: Aberdeen J. Douglass Mathews and Partners
- 12 Physical Education Centre: Birmingham Chamberlin, Powell and
- 12 Engineering Buildings: Edinburgh
- Robert Gardner-Medwin
  12 Science and Mathematics Building: Newcastle Richard Sheppard, Rob-son and Partners
- 15 Students' Union: Keele Stillman and Eastwick-Field
- 15 Science Buildings: Exeter Basil
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  Cambridge Sir Hugh Casson, Neville
- Conder and Par'ners
  18 Western Brok Development: Sheffield Gottins, Melvin, Ward and Partners
- 18 Science Buildings: Nottingham Basil Spence and Partners

#### 2 Public Buildings

- 21 Library: Coventry Arthur Ling 21 New Zealand House: London Robert
- Matthew and Johnson-Marshall 22 Parish Church: Sheffield George G.
- 22 County Council Staff Club and Offices: Wakefield A. W. Glover 25 Magistrates' Court: Lavender Hill, London J. Innes Elliott
- 25 Railway Station and Square: Coventry W. R. Headley 26 Library and Swimming Bath: Ilford Frederick Gibberd
- 26 Civic Theatre: Nottingham Peter
- 26 Village Hall: Harworth, Notts Michael Moss
- 29 Hospital: Hull Yorke, Rosenberg and Mardall
- 29 Commonwealth Institute: Kensington Robert Matthew and Johnson-Marshall

#### 3 Civic Centres

- Carlisle Charles B. Pearson and Son 30 Oldham, Lanes Cecil Howitt and Partners
- 33 Southend-on-Sea P. F. Burridge

#### 4 Further Education

- Teachers' Training College: Roe-hampton Norman and Daubarn College of Further Education: Sheffield J. L. Womersley
- 35 Chelsea College and Art School: London Hubert B.nnett 36 College of Heating, Ventilating, etc.: South London Norman and

#### Daubarn

#### 5 Office Buildings

39 Offices: Victoria Street, London Ronald Fielding

- 39 Offices: Ipswich Johns, Slater and
- 39 Television Offices: Manchester Ralph Tubbs
- 40 Offices and Flats: Millbank, London Ronald Ward and Partners
- 40 Offices: Elephant and Castle, Lon-
- don Ernö Goldfinger 43 Redevelopment: South-East London Hubert Bennett

#### & Industrial Ruildings

- 44 Laboratories and Offices; Harston, Cambs Edward D. Mills and Partners
- 45 Power Station: Willington, Derbyshire Farmer and Dark
- 45 Parking Garage: Aldersgate Street, London Oscar Garry and Partners
- 46 Factory and Offices: Camberley, Surrey Clifford Tee and Gale
- 46 Postal Sorting Office: Rathbone Place, London (Ministry of Work)
   46 Reservoir: Tryweryn, N. Wales
- Reservoir: Trywo Frederick Gibberd
- 49 Hydraulies Research Building: Wallingford (Ministry of Works)
  49 Railway Signal Box: Manchester
- W. R. Headley
  50 Research Building: Gatwick Air-
- port Yorke, Rosenberg and Mardall 50 Power Station: Thorpe Marsh, Yorks Watson and Coates

#### 7 Hostels and Hotels

- 51 Undergraduate Rooms: Cambridge Architects' Co-Partnership
  51 Hall of Residence: Brunswick
- Square, London Easton and Robert-
- 52 Old People's Hostel: Ringwood, Hants J. M. Austin-Smith and 'artners
- 53 Undergraduate Rooms: Oxford
- Powell and Moya
  53 Medical Officers' Rooms: Doncaster
  George, Trew and Dunn
- 54 Hotel: Park Lane, London Vivien Pilley
- 54 Student Teachers' Hostel: Ports-mouth Gollins, Melvin, Ward and Partners

#### 8 Housing

- 57 Housing: Camden Town, London J. M. Austin-Smith and Partners
  57 Flats and Houses: Wood Green, Middlesex A. J. Rebbeck
  57 Housing: Haverhill, Suffolk Hubert
- 58 Flats and Garage: Marble Arch, ondon Manning and Clamp
- 59 Housing: Abbots Langley, Herts Ernő Goldfinger
- 59 Flats: Southampton Eric Lyons 60 Police Housing and Station: Green-wich J. Innes Elliott

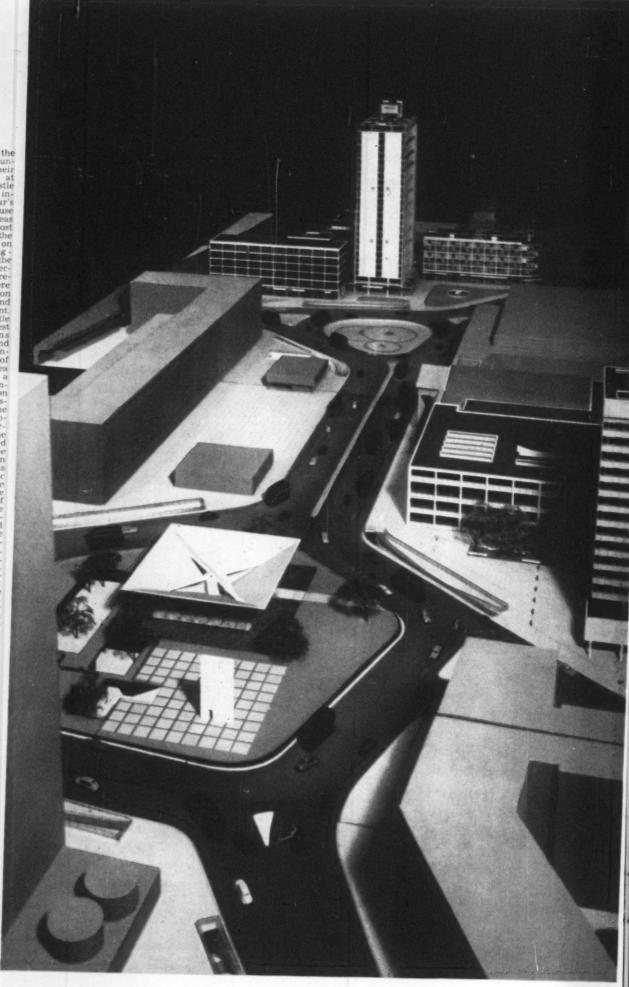
#### 9 Schools

- 61 Dining Hall: Marlborough College David Roberts 62 Special School: Prudhoe, Northum-
- berland S. W. Milburn and Partners 63 Secondary School: Crouch End, London Edward W. Mills and Partners
- 63 Grammar School: Shipley, Yorks Chamberlin, Powell and Bon

#### Miscellany

- 65 Exhibitions
- 70 Counter Attack
- 74 Contractors

This aerial view of the London County Council's model of their reconstruction area at the Elephant and Castle has been chosen to introduce this year's Preview issue because a number of the ideas and tendencies most characteristic of the work at present on architect's drawing-boards (of which the issue provides a selective survey) are represented in it. First there is the close integration of traffic movement and building development. The Elephant and Castle is one of the busiest traffic intersections south of the Thames and the L.C.C.'s comprehensive reconstruction of the war-damaged area round it began with a new traffic layout, involving the segregation of vehicles and pedestrians, by which the pattern of redevelopment was largely determined. Next there is the principle of mixed development, which the L.C.C. have lately been fostering on social as well as economic grounds. This principle is exemplified in the Draper Street portion of the area (seen in the background of the picture and also illustrated on pages 42-43). Here one small group of buildings contains offices, flats, maisonettes, shors, garages and workshops. Next there is the emergence of the tower block as the dominant feature of a group of city buildings. The same Draper Street scheme contains an office block of 25 storeys. Next there is the emergence of the tower block as the dominant feature of a group of city buildings. The same Draper Street scheme contains an office block of 25 storeys. Next there is the endevelopment of sites within reconstruction areas by private finance, involving difficult problems of architectural control. The areas shown diagramatically on the model are still under negotiation; to the left of the picture is one site where a scheme by Ernö Goldfinger has been approved (see pages 40-43). Finally there is the problem of assimilating historic buildings in a reconstructed setting. On the right of the metropolitan Tabernacle. The square construction in the centre of the picture is the Farady memorial. The building on the righ



ARCHITECTURE AFTER 1969



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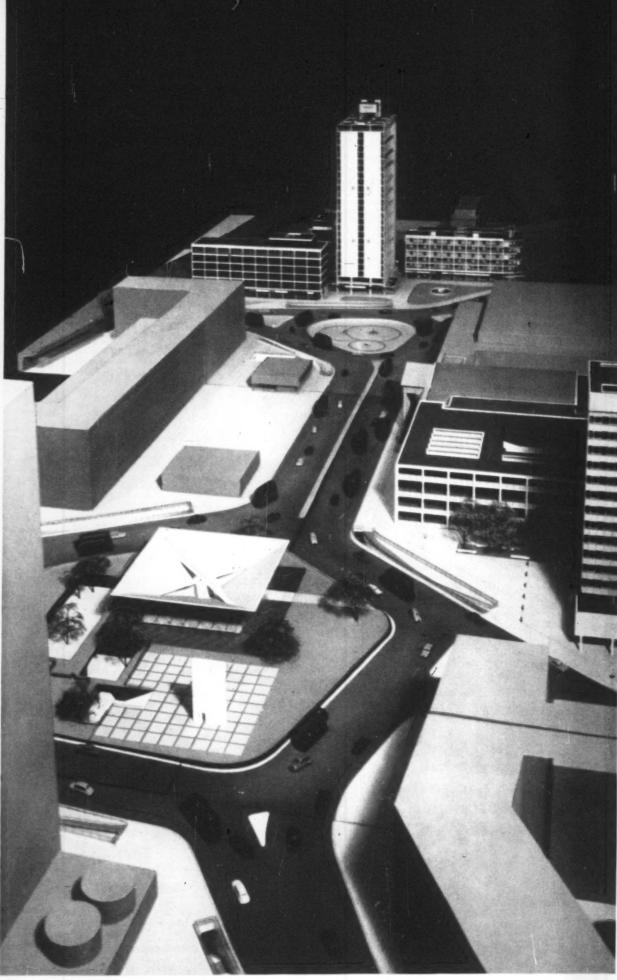
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Critics and pundits have been eager to offer labels, praise and blame—in fact it has been a period when an enterprising manufacturer could have put out a do-it-yourself punditkit in which the aspiring theorist had only to fill in the blank in the phrase The New (...)-ism and set up in business. But most of the blanket theories that have been launched have proven fallible, partly because the situation is too diverse to be covered in a single term, and partly because most labels have concentrated on the purely formal side of what has been built or projected, and failed to take into account the fact that nearly all the new trends rely heavily on engineers or technicians of genius (or nearly so). On the other hand, attempts to explain the situation in terms of new engineering techniques only, have also

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### ARCHITECTURE AFTER



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failed in their turn because—as Robin Boyd pointed out (AR, November, 1958)—it has been the architects who demanded the creation of new vault-forms and structures.

Somewhere along the line, the Modern Movement's private mythology of Form and Function has come apart, to the extent that many critics have announced the 'end of functionalism'. However, one notes that these jeremiads are usually sparked off by curved buildings, and it is clear that all that has really died is the old slogan, Functionalism with a capital F, and its accompanying delusion that curved forms were the work of untrammelled fancy, and only rectangles were rational and functional.

But is a new and equally compelling slogan, complete with capital letter, just around the corner? Plenty of experimental models are available, from Anticipatory Design to Une Architecture Autre, by way of the All-in Package Design Service and A More Crumbly Aesthetic. In the midst of these competing bids for intellectual dominion, the architectural profession, as a profession, is apt to draw back into itself a little, scribe a line around the status quo, about as far out as it can reach without straining, and say 'Everything beyond this line is Not Architecture, and no real concern of ours'.

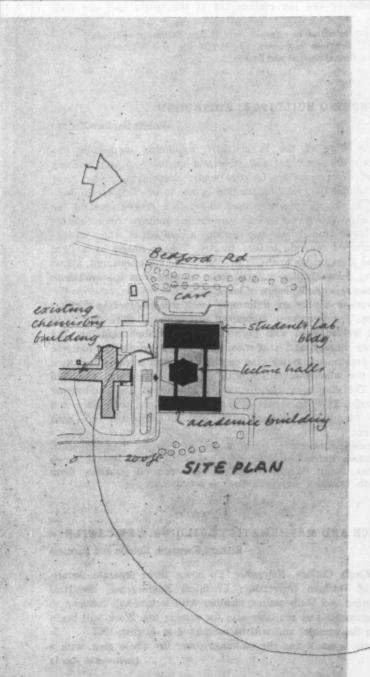
Unfortunately, attempts to stand pat on professional tradition are constantly thrown off-balance by the all-devouring artistic conscience with which the Great Pioneers endowed the Modern Movement. Architects have been conditioned for most of the past sixty years to treat nothing designed as alien to them, and they continue to invade neighbouring fields of endeavour, such as typography and road planning, where they find their professional disciplines of mind suggestively inadequate. What the inadequacies suggest is always that professional discipline be extended a little this way or that—cost-planning, the integration of the arts or some such—beyond the limits of professional stability.

Just how the balance will tip, in what stance the profession will brandish its new, compelling, unifying slogan is difficult to prophesy. There may be some subtle pointers to be found on the following pages, in which THE ARCHITECTURAL REVIEW makes its annual Preview of buildings under construction or on the drawing board at the threshold of the Sixties, but it would need skilful guidance to find them. On the other hand, it is possible to indicate three major cultural (or, if you prefer, theoretical) influences that will have to be equilibrated before the situation steadies. All three are old and familiar friends, but all have acquired new faces in the last thirty years.

One is Science, constantly modifying the way in which an architect can act; the second is his view of the profession itself, affecting the subjects on which he permits himself to act; the third is the study of history, constantly modifying his view of what he has done after he has acted.

The last of these is a subject that could hardly be discussed among progressive architects in 1927, but now—in 1960—it is as compelling as a popular song. It will be discussed, along with the impact of science and current views on the nature of the profession, in a series of articles in THE ARCHITECTURAL REVIEW this year. The series, which is under the editorship of Reyner Banham, will commence in February with an attempt to take stock of the present state of architecture, torn between tradition and technology, and will conclude in June with a survey of the emergent design-criteria for the Sixties. None of these features is committed to prophecy, the aim, rather, is to examine the ground on which we stand and the ground where we shall have to tread next.

## UNIVERSITY BUILDINGS



### NATURAL PHILOSOPHY BUILDING: ABERDEEN

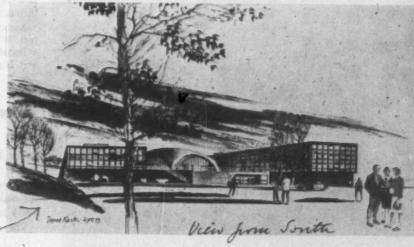
J. Douglass Mathews and Partners

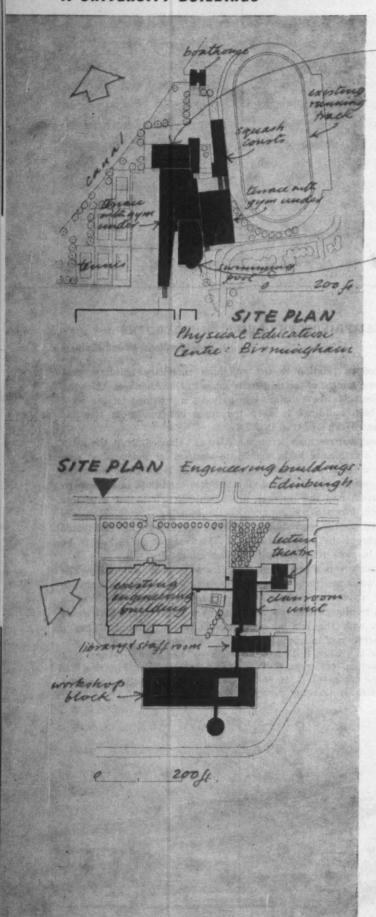
Designed in relation to the adjoining chemistry building; part of the development of the university lands in Old Aberdeen following Prof. Robert Matthew's plan. Car parking is provided on the west side of both buildings to keep the space between them free for pedestrians. Work will start in July.

Teaching and research accommodation is balanced about the main entrance and lecture halls, which are planned for independent outside access. A large lower-ground floor area, required to meet the needs of complex physical and vibration-free conditions in the experimental areas and the research areas controlled from the academic staff block, forms a podium base to the building. Individual blocks are linked to the entrance by covered ways, forming courtyards either side of the main lecture-hall. The research areas had to be planned in close relationship to the workshops.

The structure is a precast concrete frame, exposed externally. The podium walls are faced with granite and the infill panels between mullions above the podium with granite-faced slabs. The podium roof is a reinforced concrete slab with no exposed beams that would interfere with the run of services. The main lecture-hall has a shell-concrete roof independent of the main structure.

Partner in charge, E. D. Jefferiss Mathews. Executive architect, E. J. Hill. Structural engineers, C. V. Blumfield and Partners. Electrical and mechanical engineers, G. H. Buckle and Partners. Acoustics consultant, Hugh Creighton. Quantity surveyors, Dansken and Purdie.





### PHYSICAL EDUCATION CENTRE: BIRMINGHAM

Chamberlin, Powell and Bon

Contains sports hall two large and five small gymnasia, indoor ice-rink, squash-courts and swimming-pool as well as administrative and changing accommodation. To the west of the group of buildings is a hard play area, and rising from it to the level of a canal which bounds the site are six tennis courts in the form of stepped terraces. Work will begin this autumn.

The gymnasia, which required to be top-lit, are grouped, together with the ice-rink and the teaching, changing and administrative accommodation, on the lowest part of the sloping site adjoining the main university ring road. Above these the site is terraced upwards towards the existing running-track, and here are placed the sports hall, squash-courts and a boat-house. Higher still is the swimming-pool, poised above an entrance concourse with its higher end, covering the diving-platforms, dominating the whole group.

Construction is reinforced concrete for retaining walls and floor and roof slabs, and load-bearing brick external walls. The swimming-pool enclosure and the conoid roof of the sports hall are shell concrete.

Assistant architect in charge, John Honer. Structural engineers, Flint and Neill. Services engineers, G. H. Buckle and Partners. Quantity surveyors, Davis, Belfield and Everest.

### ENGINEERING BUILDINGS: EDINBURGH

Robert Gardner-Medwin

On the edge of the Braid Hills, containing workshops and laboratories for electrical and structural engineering and teaching and staff accommodation for the whole Engineering Department whose buildings adjoin. Construction is due to be complete in July.

A fall in the site has been used to create a sunken court at the eastern edge. This forms an enclosure for the students' common-room on the lower ground floor and contains a pool out of which springs the reinforced concrete lecture theatre. This is linked by a light steel and glass bridge to the crush-hall in the classroom unit, allowing heavy demonstration material to be wheeled from the workshops to the theatre without change of level.

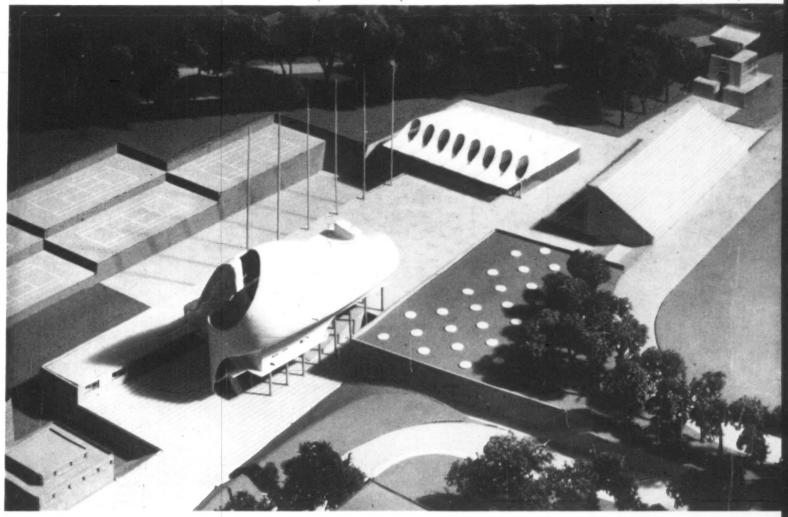
The various blocks are differently constructed according to their functions. The two-storey laboratory and drawing office unit is in exposed welded steel with plywood and aluminium cladding. The five-storey library and staff-room unit has a reinforced concrete (partly prestressed) frame clad on the ends with mosaic-lined brick and in the window-spandrels with grey stove-enamelled insulated panels. The classroom unit (largely single-storey) has load-bearing brick walls. The upper part of the theatre is clad with hardwood planks. Aluminium windows of a constant proportion are used throughout.

Associate architects, Stephenson, Young and Partners. Executive architect, William Knight. Architectural assistants, Anthony Kneale, James O'Donahue, Stuart Russell, George Wilkie. Structural engineers, Blyth and Blyth. Quantity surveyors, Todd and Ledsdon.

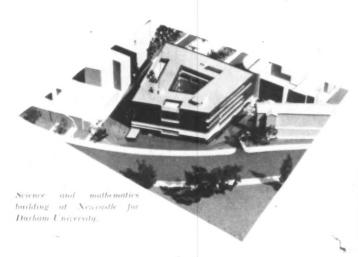
### SCIENCE AND MATHEMATICS BUILDING: NEWCASTLE Richard Sheppard, Robson and Partners

For King's College, Newcastle. To house three separate departments of Durham University: Chemical Engineering, Electrical Engineering and Mathematics, together with lecture-hall common to all departments and available also for outside use. Work will begin early in the summer and will be completed in August, 1962.

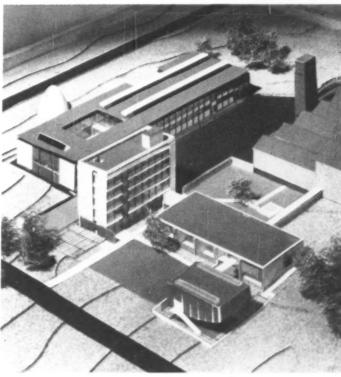
The site is small and the buildings cover the whole area, with a [continued on page 15

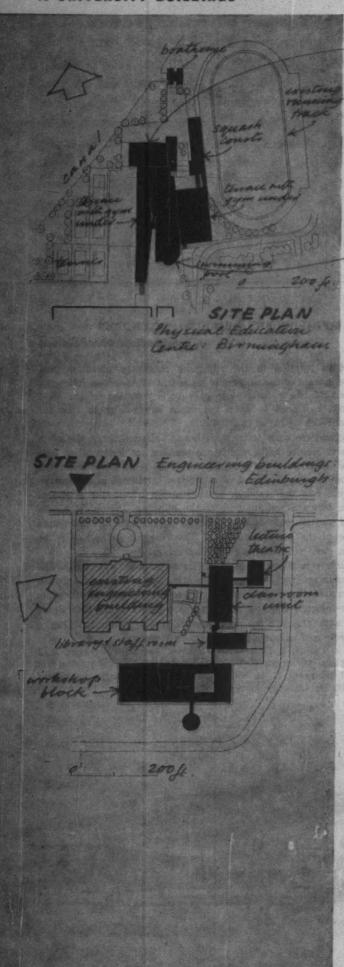


Physical education centre for Birmingham University. In the centre, with a vonoid roof, is the swimming-pool, and beyond it, with the row of elliptical openings, the sports will. Changing-rooms are beneath the terrace between them, and beneath the upper terrace, lit by circular rooflights, are the gymnasia. The squash courts are beneath the scating beside the running track, and beyond them (top right) is the boat-house.



Right, engineering buildings, Edinburgh University: lecture-theatre in foreground, linked to classroom unit; five-storey library and staff unit in centre; laboratories, drawing-office, etc., beyond.





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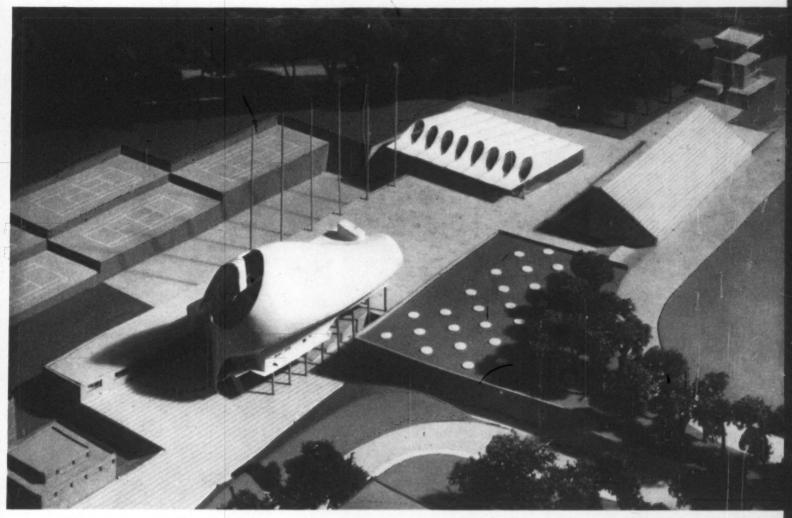
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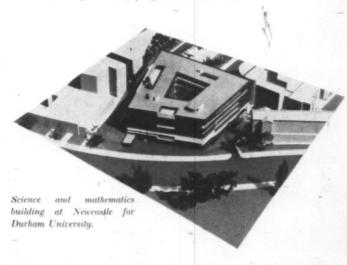
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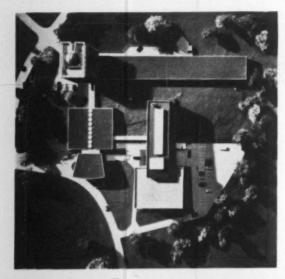
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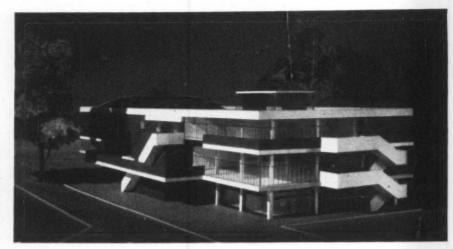


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### 1. UNIVERSITY BUILDINGS





Above, students' union building for the University College of North Staffordshire, Keele, by Stillman and Eastwick-Field. The domed roof at the far end covers the two-storey ballroom.

Science buildings, Exeter University: left, from above, showing the three linked elements of the plan—physics building, lecture-hall block and chemistry building; below, from the south, with the tower of the physics building on the left and the chemistry building on the right.



building: Newcastle staff + laws. FLOOR

continued from page 12]

small central courtyard The side north-east of the courtyard houses the Chemical Engineering Department, and the side south-west the Electrical Engineering, which also shares the north-west side with administrative offices and the south-east side with the lecture-halls. These have their own entrance and staircase and span 100ft. over the entrance to the courtyard. The Mathematics Department, which consists chiefly of lecture-rooms, seminar-rooms and small rooms for professors and lecturers, occupies the fourth and fifth floors on the south-east and north-east sides.

The building has a reinforced concrete frame with floors spanning 30ft. from a spine frame to the outside walls. It is faced largely in brick, with continuous strip windows varying in height (according to room-heights and uses) from 30ft. in the pilot-plant laboratory to 8ft. in the small offices.

Architect in charge, D. P. Challis. Structural engineers, Hajnal and Myers. Electrical engineers, Barlow, Leslie and Coombes. Quantity surveyors, E. C. Harris and Partners.

### STUDENTS' UNION: KEELE

#### Stillman and Eastwick-Field

For the University College of North Staffordshire, in park-like surroundings between an existing car-park and a belt of trees. Work will begin this year.

The building is cut into the sloping site, allowing the ground floor offices to have lower ceilings than the main entrance hall and the shops and bank, also on the ground floor but with separate entrances. On the first floor are a lounge and snack-bar, both opening on to a large cantilevered terrace, and a two-storey ballroom. Above are billiards and games rooms, TV room, reading rooms and music rooms; also a caretaker's flat.

The structure is a reinforced concrete frame, divided into three sections to guard against mining subsidence. Cladding is concrete panels, bush-hammered.

Associate architect in charge, R. Smorczewski. Structural engineer, Donovan H. Lee. Consulting engineers, Hoare, Lea and Partners. Quantity surveyors, Harry Trinick and Partners.

#### SCIENCE BUILDINGS: EXETER

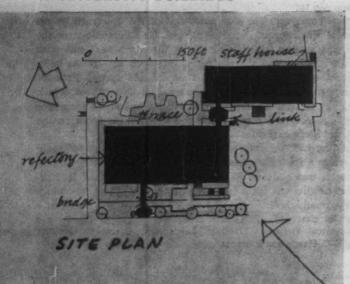
### **Basil Spence and Partners**

For the physics and chemistry departments, on a steeply sloping and open hill-top site overlooking the city and valley of the Exe: the second group of buildings on this new site being developed by the university, the first having been Sir William Holford's Arts building (AR Preview issue, January 1957), opened last May. To be built in three stages over the period 1961-64, beginning with the chemistry building.

This is planned as three elements: research wing (reinforced concrete structure with precast concrete fins, infill panels of Westleigh stone, aluminium sash windows); teaching wing (reinforced concrete with prestressed beams giving a clear span over the laboratories, faced with brick); base containing entrance hall, boiler-house, service rooms and some laboratories (reinforced concrete faced with brick).

The second stage will be a lecture block serving both departments (a mixture of loadbearing brick and reinforced concrete construction) and the third stage the physics building in reinforced concrete with brick facing. The physics building has a tower marking the highest point of the site, topped by an observatory.

Engineers, Ove Arup and Partners. Heating and ventilation consultants, Steensen, Varming and Mulcahy. Quantity surveyors, Reynolds and Young.



### REFECTORY AND STAFF HOUSE: BIRMINGHAM

Sir Hugh Casson, Neville Conder and Partners

Two linked buildings, placed at right-angles and facing the same paved court as the projected biology building (see below). Work on the refectory began last September and on the staff-house will begin in March.

The refectory has a snack-bar, shops and a bank on the ground floor, with the main student dining-room on the first floor, together with a separate dining-room for technical and administrative staff.



On the second floor are common-rooms and on the third a dancehall, rising into the roof. The staff-house has a bar, billiards room, cloakrooms and women's common-room on the ground floor, commonroom and snack-bar on the first, dining-room and kitchens on the second and several formal dining-rooms—together with guest and staff bedrooms on the third.

Both buildings have a reinforced concrete frame with brick cladding and aluminium infill panels below cill level on the window wall of the refectory.

Assistant architects, Montague J. Turland (refectory); D. F. Bayley (staff house). Engineers, Clarke, Nicholls and Marcel. Heating and ventilating engineers, A. J. Smith and Partners. Quantity surveyors, Bond, Foster and Partners.

### BIOLOGY BUILDING: BIRMINGHAM

Playne and Lacey

Part of the new development plan by Sir Hugh Casson and Neville Conder and near the latter's refectory and staff house (see above) and the chemistry building, also by Playne and Lacey, now under construction and illustrated in the Preview issue, January, 1958. The biology building will be started this summer and completed in 1963.

It houses seven departments (Applied Biochemistry, Botany, Chemical Physiology, Genetics, Medical Biochemistry and Pharma-eology, Microbiology and Zoology) in a three-storey courtyard block linked by two bridges to anine-storey tower. There are some common facilities such as lecture-theatres and staff and student rooms, but most of the space is occupied by specialist departmental laboratories



3 lecture theatres Mossoo - west block SITE PLAN Physics building

for teaching and research. At the top of the tower is an animal-house with access corridor cantilevered outwards.

The structure is a reinforced concrete frame. The tower has no internal columns to allow freedom of laboratory planning. Services are run in deep floors and vertical ducts. The courtyard block is faced with dark grey brick and Portland stone (matching the chemistry building) and the tower with precast blocks with an aggregate chosen to give a rough texture.

Engineers, Ove Arup and Partners. Quantity surveyors, Hamilton H. Turner and Son.

### PHYSICS BUILDING: HULL

#### Architects' Co-Partnership

Part of Sir Leslie Martin's recent development plan, the building occupies two sides of a quadrangle bounded on the other sides by the uncompleted Students' Union and a future biology building. Construction of the first two stages (the east-west block, the three lecture theatres and the northern part of the north-south block) will begin in August and finish by May, 1961. The third stage, comprising the remainder of the north-south block, will follow in 1963 or 1964 and allowance has been made for a possible extension northwards as a fourth stage.

The building is three storeys high with teaching accommodation in the east-west block and research laboratories, stores and workshops in the other. Construction is reinforced concrete, exposed



externally at edge beams and at the photobolic screens at window transom level. The continuous wall spandrels are brick and window-frames timber. Services in the teaching block are taken from ring mains in false ceilings, rising to the floor above, and in the research block in vertical ducts rising from a below-ground crawl duct. The teaching block has heated ceilings.

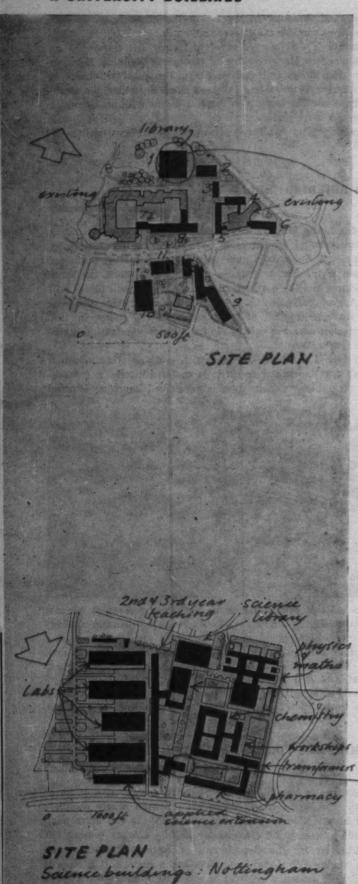
Structural engineers, Ove Arup and Partners. Services engineers, Edward A. Pearce and Partners. Quantity surveyors, Monk and Dunstone.

### ECONOMICS AND POLITICS BUILDING: CAMBRIDGE Sir Hugh Casson, Neville Conder and Pariners

The third major building on the Sidgwick Avenue site. It forms the fourth side of the courtyard enclosed by the nearly complete U-shaped library Construction will begin this year and finish next.

The building (see p. 19) contains the Faculty Library seating 180, related libraries for the Departments of Applied Economics and Statistics, studies, common-rooms, offices and a canteen. It is close to Selwyn College garden, which will be extended up to the walls of the building with a pedestrian way through at ground level. Beneath the building is a boiler-house (already completed) serving the whole development. The main library has a two-level well in the centre. The

SITE PLAN



statistical library is insulated from it to allow the use of computers. Construction is reinforced concrete frame with bush-hammered finish and brick (Sussex stocks) walling. Windows are natural and black anodized aluminium.

Structural engineers, Jenkins and Potter. Mechanical engineers, A. J. Smith and Partners. Quantity surveyors, A. S. Wilson and Partners.

### WESTERN BANK DEVELOPMENT: SHEFFIELD

Gollins, Melvin, Ward and Partners

A revision (required by increased numbers of students) of the same architects' winning scheme in the competition held in 1953. Work has already gone forward on some of the buildings as originally planned, including the library, 1 on plan (A.R. Preview issue, January, 1955), which was completed last autumn and illustrated in the Review last month. The boiler house, 3 on plan, is also completed.

Most of the buildings have been increased in height. The Arts tower, 2 on plan, will begin this year. It rises sixteen storeys above a basement group of lecture theatres. The four top floors house the Department of Architecture, with its architectural lecture-theatres on the roof. The east chemistry wing, 6, with lecture-theatres and workshops below and four floors of teaching-laboratories above, began in 1958 and will finish next July. The north chemistry wing, 4, similar, with large teaching laboratories on five floors, will begin in 1963. The west chemistry wing, 5, containing three floors of research laboratories, is under construction. The Bursar's department, 7, with open ground floor, has just started. The physics and mathematics building, 9, a seven-storey block with lower wings containing lecturetheatres and workshops, began last spring. University House (extending the present Students' Union), 10, has just started and will take two years. A theatre to seat 600, 11, is to be started in 1961-62. The botany, zoology and genetics building, 8, of five or six floors, will probably start in 1962-63.

Construction is mostly reinforced concrete and steel in the case of the chemistry wings, which have brick or stone flank walls. The arts tower and other main buildings have a combination of curtain walling, mosaic, concrete and glazed brick.

Assistant architects, P. Guest; B. P. Mayes; H. Prime.

### SCIENCE BUILDINGS: NOTTINGHAM

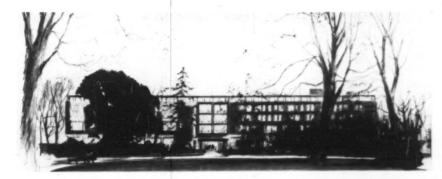
### **Basil Spence and Partners**

At the north side of University Park: the area set aside for science in the Jellicoe-Percy Thomas development plan of 1955 (see AR Preview issue, January, 1956). The first group of engineering laboratories (mining and thermodynamics) is just finished, the chemistry and the first-year teaching building are under construction, the second-year and third-year teaching building and a second group of engineering laboratories (civil and mechanical) are about to start, and the physics and mathematics building will start in August.

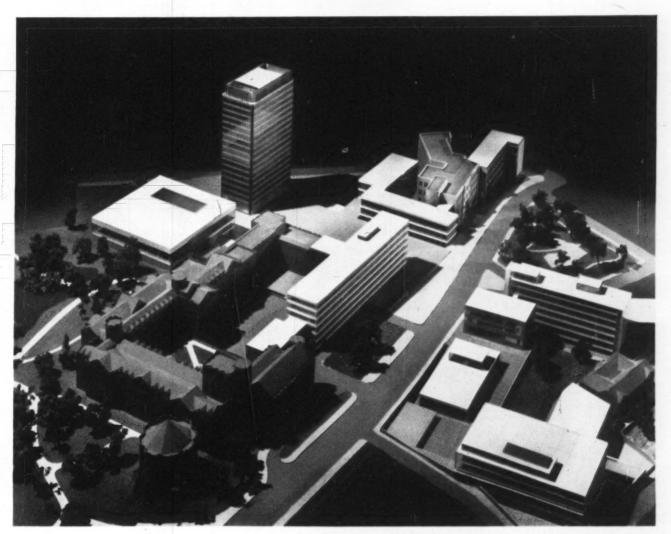
The pure science buildings are to the west and the applied science buildings to the east, where planning was limited by some Ministry of Works buildings that cannot be taken over until 1970. In the applied sciences group the two teaching buildings are linked by an exhibition hall. Later, on the north of the site will be a tower for electrical engineering with an adjoining low block for heavy electrical engineering, and on the south a science library.

The buildings are differently constructed according to requirements, but unity is given by a 5ft. modular pattern. External finishes include brick, stone and timber.

Structural engineers, Ove Arup and Partners. Services engineers, A. F. Myers and Partners and Phillips, Son and Partners. Quantity surveyors, Gleeds.

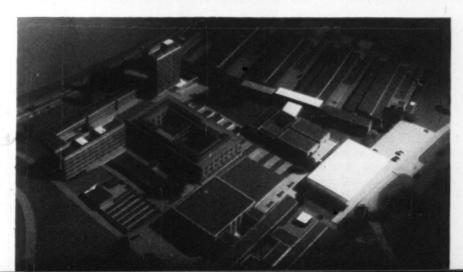


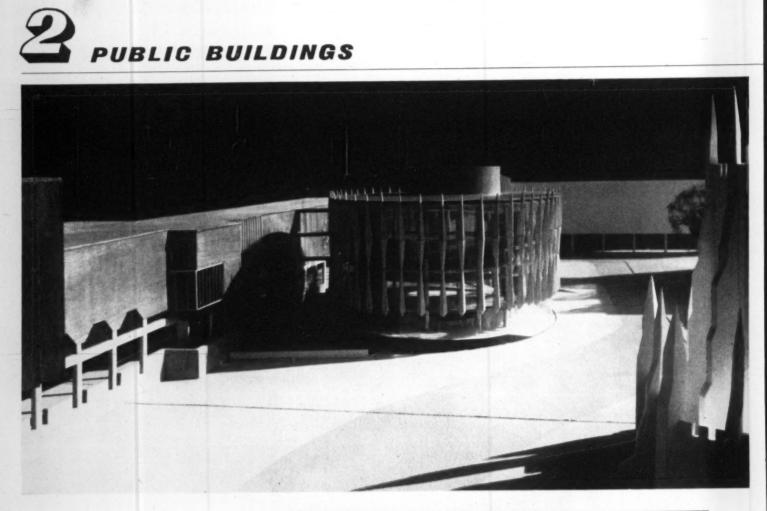
Left, faculty of economics and politics in the Arts Centre, Sidgwick Avenue, Cambridge, by Sir Hugh Casson and Neville Conder: the elevation facing Selwyn College gardens.



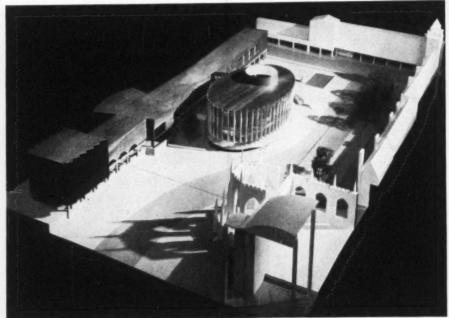
Above, revised development of the Western Bank area of Sheffield University. In the left background are the library (already built) and the sixteenstorey Arts tower. The other new buildings are identified on the plan opposite. Left foreground: existing buildings.

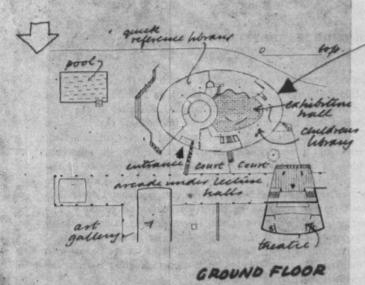
Right, science buildings, Nottingham, from the south-west. The tower in the background is the future electrical engineering building.

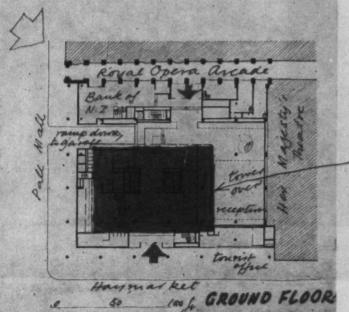




The central library, Coven-try, and the new square try, and the new square surrounding it: above, from the end of the ruined cathedral, showing the elliptical library linked to the new art-gallery and theatre; right, looking down on the square, with the cathedral ruins in the foreground.







### LIBRARY: COVENTRY

### Arthur Ling (City Architect)

A central library sited in the new square north of the Council House. It is connected to the art gallery which forms the north side of the square, and to the theatre, and the arcade beneath the latter provides a covered link between the two buildings and the theatre. On the east side of the square are the new City Architect's offices (three storeys on piloti) and on the west side the cathedral ruins with the new cathedral beyond, so that the elliptical library is surrounded by old and new buildings with views from it to the cathedrals. Passers-by will see into it through glass and aluminium walls. No starting date has yet been fixed.

The main book stack, in two tiers accommodating 100,000 books, is in the basement, together with a news-room, three meeting-rooms and a lecture-theatre seating 400. On the ground floor are a quick-reference library, an exhibition hall to be used in connection with the adjoining art-gallery and, on two levels surrounding the hall, a children's library. This is also directly connected to the main lending library on the first floor. Above this, still within the inner ellipse of the building, is a music library with sound-proof cubicles. It is connected to the lecture-halls in the adjoining building. The staff workrooms form a vertical core through the building from the stockroom and service entrance in the basement to the reference library at the top. Also at the top are the Coventry and Warwickshire collection and students' study-rooms, at different levels connected by a spiral ramp.

Construction is reinforced concrete, with the floors cantilevered outwards from columns round the inner ellipse but partly supported at the edges by the window-mullions. These are aluminium. The glazing is sloped to show three facets.

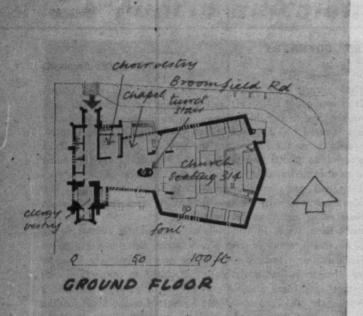
Principal architect, William Kretchmer. Job architect, R. S. Johnston.

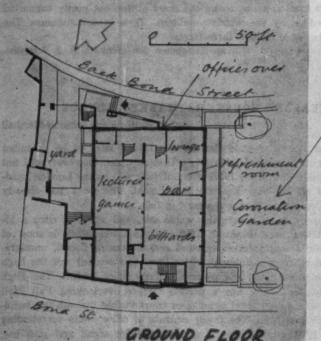
### NEW ZEALAND HOUSE: HAYMARKET, LONDON

### Robert Matthew and Johnson-Marshall

On the site of the old Carlton Hotel (and later to be extended to cover the site of Her Majesty's Theatre which, however, will not be available until after 1970). The building will be the London head-quarters of the New Zealand government. Site work has already begun. Completion is expected early in 1961.

A 4-storey block covers the whole site, and above it rises a 15-storey tower to a height of 225ft. In the lower block is most of the public accommodation (ground and mezzanine floors), immigration and other departmental offices (first and second) and the High Commissioner's suite and external affairs office (third). The High Commissioner's suite has a private terrace overlooking Pall Mall and at second-floor level is an open court visible through the building from Pall Mall. The tower consists of office floors surrounding central lift-shafts. On top is a penthouse for social and staff use.





Ground-floor shops and a bank are entered from the adjoining Royal Opera Arcade from which there is also an entrance to the central public space.

The reinforced concrete structure includes a pair of box columns forming the central core of the tower. The ground floor is faced in black granite; the remainder in Portland stone, with plate glass panels of unusual size—in the lower storeys they are 18ft. by 9ft. uninterrupted glass area. The whole building is air-conditioned and the lower block has double glazing against traffic noise.

Senior architect in charge, Maurice Lee. Job architect, K. G. A. Feakes. Structural engineers, Scott and Wilson, Kirkpatrick and Partners. Services engineers, J. Roger Preston and Partners. Quantity Surveyors, Franklin and Andrews.

### PARISH CHURCH: SHEFFIELD

George G. Pace

St. Mark's, Broomhall: to replace a church by W. H. Crossland built in 1871 and largely destroyed by bombs in 1940. The tower and spire, however, the north and south porches and part of the west wall survived, and these are incorporated in the new church. Work is due to start this spring and to be completed by the autumn, 1961.

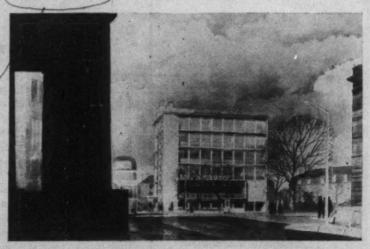
The church has unusually spacious accommodation at the west end. in the form of an entrance corridor and narthex, because of the expectation that it will be associated with a hospital centre to be developed in the parish, and ultimately with Sheffield University.

The wall frames and roof supports are reinforced concrete. The outer section of the walls are rubble stone; dressed stone is Darley Dale. The inner section of the walls is brick or insulating material finished with rough plaster. Roofs have laminated timber beams with timber infilling. They are covered with copper. Heating is from the floors and the lower part of the walls.

Engineers, Ove Arup and Partners. Acoustic consultant. D. T. E. Jennings. Quantity surveyors, Thompson and Alexander.

#### COUNTY COUNCIL STAFF CLUB AND OFFICES: A. W. Glover (West Riding County Architect) WAKEFIELD

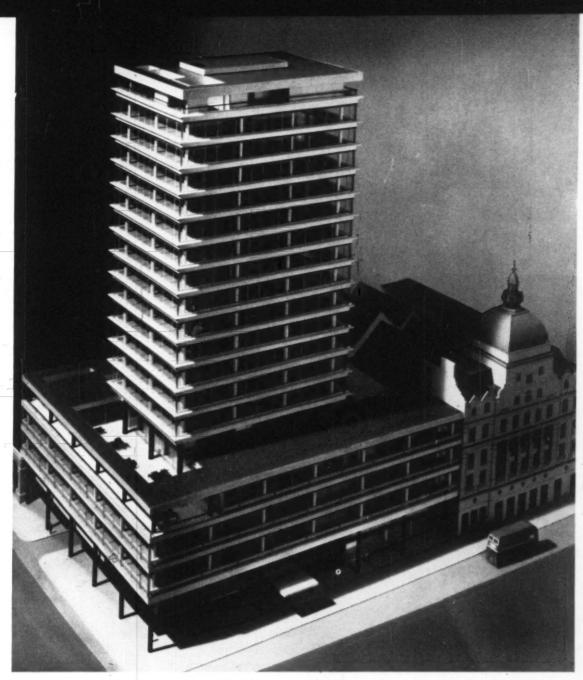
To provide club facilities for the staff of West Riding County Council and offices for some 300 council staff at present dispersed in various terrace housing. The building, at the north end of the Coronation Garden, completes the fourth side of a square group of



county council buildings started 60 years ago. Construction of the new building began last June and will be finished in March, 1961.

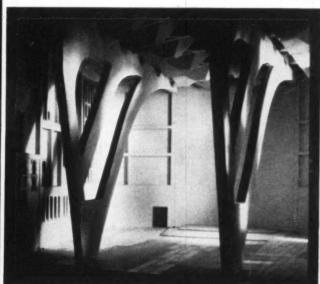
The club occupies the two lower floors, with lounge, refreshment-

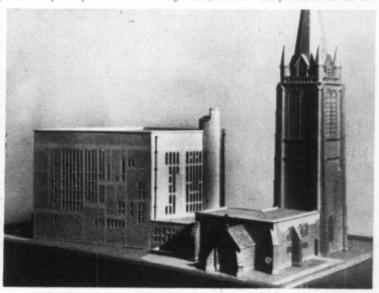
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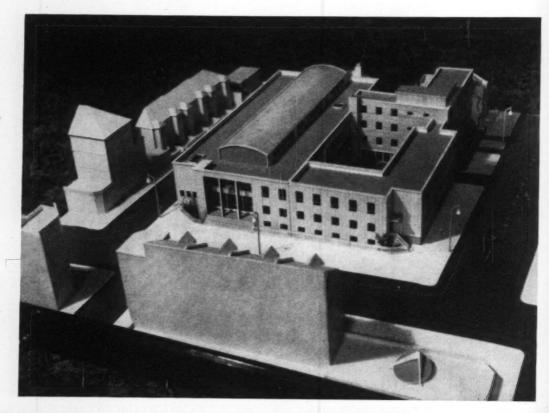
New Zealand House, at the corner of Haymarket and Pall Mall, by Robert Matthew and Johnson-Marshall. At the left-hand edge of the picture is the entrance to Royal Opera Arcade, which is being retained. On the right is Her Majesty's Theatre, which is being retained until after 1970.

Below, interior (looking east) and exterior of St. Mark's Church, Broomhall, Sheffield, showing the surviving tower and porch of the nineteenth-century church, which are incorporated in the new one.



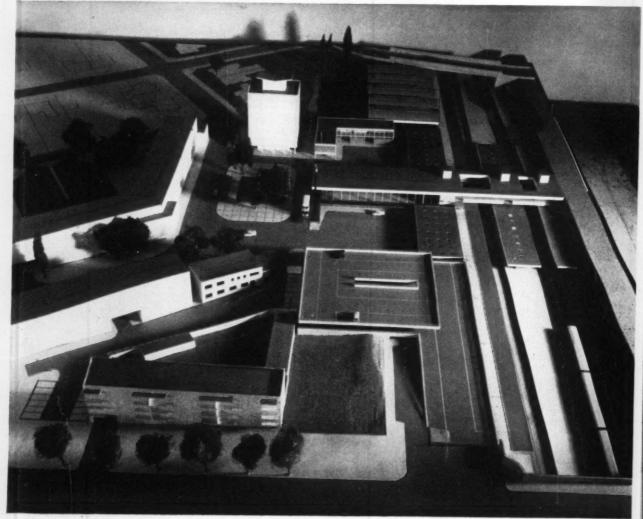


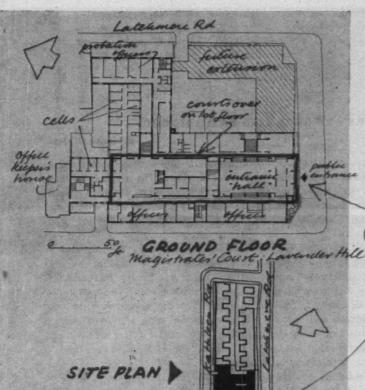
2. PUBLIC BUILDINGS

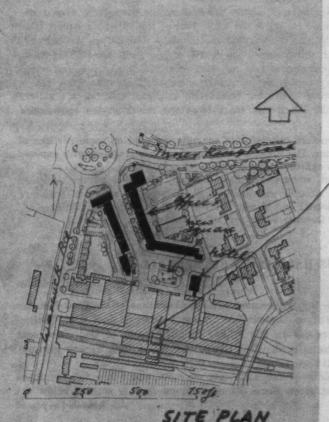


Right, magistrates' court, Lavender Hill, from the south, also showing later rebuilding of the police station.

Railway station, Coventry, and the new square from which it will be approached. The passenger concourse runs at right-angles to the railway-tracks (right). On this side of it is the two-storey car-park also reached from Warwick Road (foreground). At the far side of the square is a tall office building.







continued from page 22]

room and billiards-room (all served from a central bar) and gamesroom below, and dining-room and kitchen above, together with a meeting-room with a floor slightly higher which can be opened into the dining-room and serve as a stage. 250 meals can be served daily. Over the club are six floors of offices, with a separate entrance.

The building has a steel frame with precast concrete floors. The solid end walls are faced with York stone; the window walls are storey-height timber frames with steel sashes and vitreous enamel panels. Heating is by ceiling panels.

Deputy county architect, W. T. C. Walker, Assistant Architects, F. Thornton; M. K. Zadzuik. Engineers, G. Mundy (structural); T. E. Cunningham (heating); B. Davies (electrical). Quantity surveyor. W. Pepper.

### MAGISTRATES' COURT: LAVENDER HILL, LONDON J. Innes Elliott (Chief Architect, New Scotland Yard)

To serve the South-West London area and to provide offices for the Probation Service in the same area. The model shows also a later development on the same site, the rebuilding of the police station which will complete the elevation to Lavender Hill. Construction of the magistrates' court and offices will begin next autumn.

The plan was largely determined by the need to provide separate entrances for the public, magistrates, prisoners and probationers. The various elements, together with the future police station, form an enclosed square of three-storey buildings, dominated by the segmental roof of the courts. The structure is a reinforced concrete frame faced on the street elevations with precast panels of Portland stone, and elsewhere with brick. The court rooms are airconditioned and the areas used by prisoners have air control.

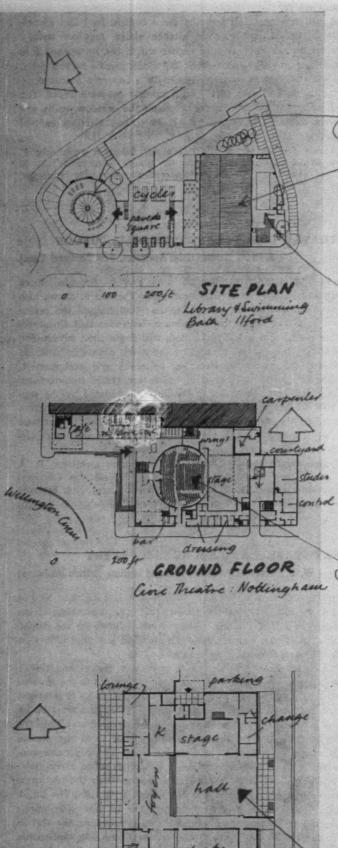
Senior architect in charge, G. B. Vint. Executive architects, D. J. Hogarth; D. E. Chapman. Structural engineer, R. F. Galbraith. Electrical and mechanical engineer, A. R. L. Collis (Chief Engineer, New Scotland Yard). Quantity surveyors, Thurgood, Son and Chidgey.

### RAILWAY STATION AND SQUARE: COVENTRY W. R. Headley (Architect, Midland Region, British Railways)

To replace the present station. Work began last October and is expected to be completed by the spring, 1961. The replanning of the station involves laying out a new square, also shown on the model, providing sites for an 8-storey hotel on the east side and offices on the north. Work on these will begin in 1962.

The station is planned to segregate passenger, parcel and G.P.O. traffic. A projecting concourse is placed at right-angles to the covered platforms and associated buildings. Passenger vehicles go to the right of the concourse and other traffic to the left. Passengers arriving by bus are set down at the end, under cover, and a covered way links the station with a two-storey car-park reached both from the station approach and at high level from Warwick Road. The concourse contains booking-office, information-office, left-luggage office, shops, telephones and train-indicators. From it passengers reach the platforms by bridge. Parcels have a separate overbridge with lifts. The buildings facing the London-bound platform have on one side public rooms (including waiting-room and cafeteria overlooking the station forecourt and the square beyond) and on the other side staff-rooms. There is also a waiting-refreshment room on the island platform.

The bridges and similar structures are of reinforced concrete with the bridge decks suspended by stainless steel hangers from the high roof-beams. The concourse is partly concrete and partly light steel framed, as also are the remaining buildings including the roofs over the platforms. The parcels office has an exposed concrete frame.



VULLAGE HALL HARWORK

Elsewhere the concrete is mosaic faced. Soffits are of hardwood and brickwork a dark grey.

Designed under the direction of A. N. Butland, chief civil engineer, Midland Region. Associated architects, Arthur Ling (Coventry City Architect); assistants, Michael McLellan; Malcolm Reece. Consulting engineers, Ove Arup and Partners.

### LIBRARY AND SWIMMING BATH: ILFORD

Frederick Gibberd

For the borough council, on a triangular site with its apex adjoining a traffic roundabout in a suburban area. The circular library fits into the apex. The swimming bath faces it across a paved square but the two buildings are linked by a screen wall with cycle stores and a service area behind. A starting date has not yet been fixed.

The library has a tall inner core with clerestory lighting and is surmounted by a shallow dome containing the lending library. Reading and lecture rooms and the children's library surround the core, the last opening into a small walled garden. The swimming bath is designed to international and Olympic standards. One long side is glazed and overlooks a paved garden with a stepped terrace for sunbathing, children's paddling pools and a refreshment kiosk. The opposite side has stepped seating for 1,300 spectators and a snack-bar, with changing accommodation beneath.

Both buildings are reinforced concrete with infill walls of glass or stone-faced concrete slabs.

Associate designer, H. J. Mulder (Ilford borough engineer).

#### CIVIC THEATRE: NOTTINGHAM

Peter Moro

Called the Playhouse Theatre, alongside Wellington Circus, near the centre of the city, it replaces a smaller theatre of the same name. Construction will begin this summer.

The planning was largely dictated by the irregularly shaped site and the desire to mask the flank wall of the adjoining Albert Hall. The auditorium (seating 520 in the stalls and 250 in the balcony) is circular and occupies the centre of the main block. This has a service courtyard at rear, dressing-rooms along one side and workshops the other. From one corner, alongside the entrance foyer, projects a wing containing restaurant, kitchens, café, an art gallery beneath the latter, and (in a two-storey block at the end) actors' flatlets.

The structure is reinforced concrete, exposed on some portions of the exterior. The upper part of the foyer has cladding with exposed light grey aggregate. The base is black brick.

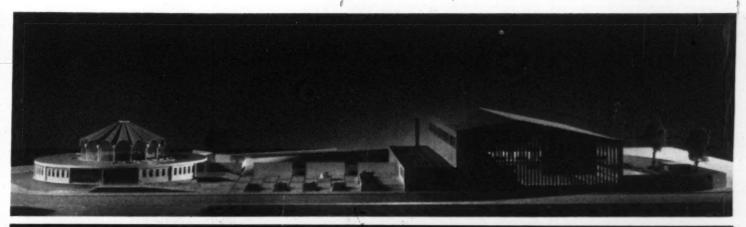
Assistant architect, Michael Mellish. Theatre consultant, Richard Southern. Acoustic consultant, H. R. Humphreys. Structural engineers, Clarke Nicholls and Marcel. Services engineers, Steensen, Varming and Mulcahy. Quantity surveyors, Davis, Belfield and Everest.

### VILLAGE HALL: HARWORTH, NOTTS.

Michael Moss

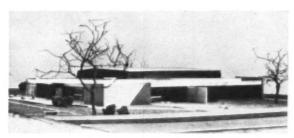
For the Nottinghamshire District Committee of the Coal Industry Social Welfare Organization: to serve miners and their families and old people in this village 10 miles south of Doncaster, near the Yorkshire border. The site adjoins the existing miners' institute. Work will begin in April.

The multi-purpose hall seats over 400 and has a fully-equipped stage and green-rooms. Its semi-sprung floor is set 3ft, below the [continued on page 29]

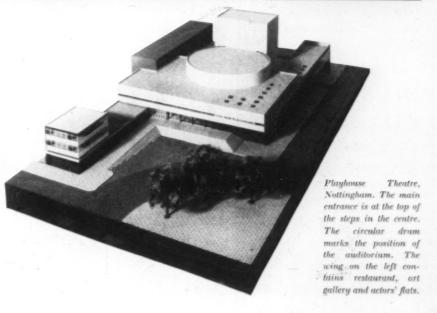




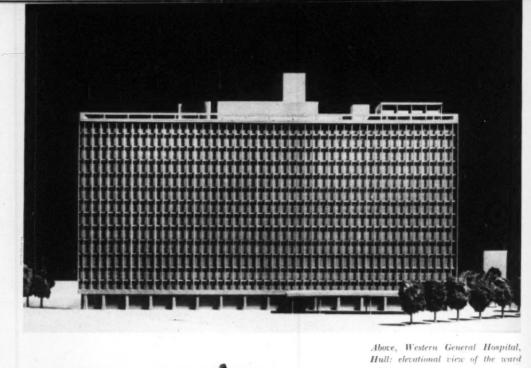
Library and swimming-bath at Fullwell Cross, Ilford. The circular library is separated from the swimming-bath by a paved square.



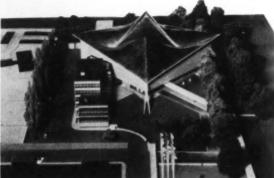
Above, village hall for miners and their families at Harworth, Notts: the hall in the centre; old people's lounge on the left.



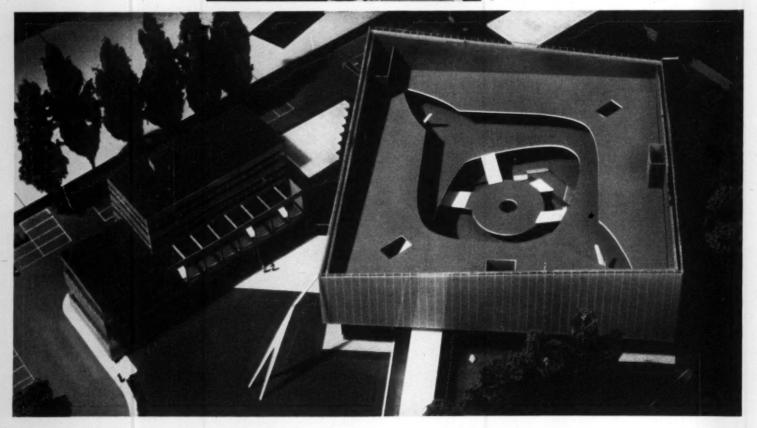
### 2. PUBLIC BUILDINGS

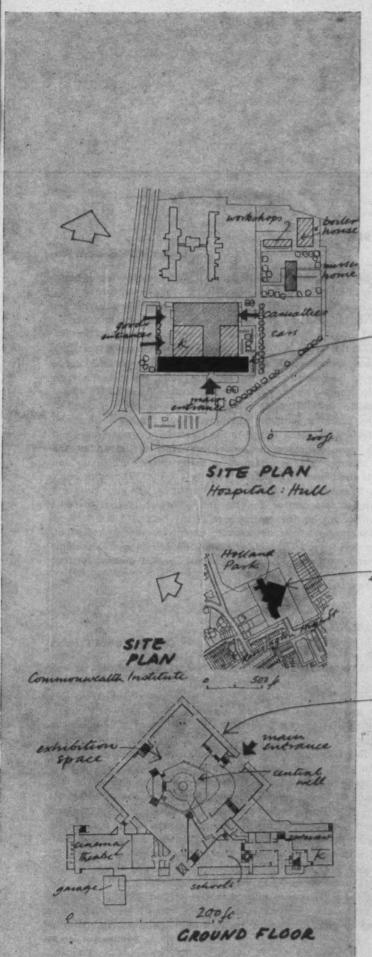


wing.



Commonwealth Institute, Kensington: left, from the High St., with the copper-roofed exhibition hall beyond its garden and forecourt; below, with the roof of the hall removed to show the arrangement of galleries within.





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general floor level. Other accommodation, placed at right-angles to the hall, include an old people's lounge (designed for use in conjunction with the hall or independently), service kitchen and secretary's office. The hall and lounge open on to a terrace facing existing bowling-greens.

Construction is laminated timber. Structural members are left exposed and have a natural finish internally. Cladding is grey brick, vertical boarding and timber curtain-walling.

Quantity surveyor, William C. Kitch.

### HOSPITAL: HULL

### Yorke, Rosenberg and Mardall

The Western General Hospital (for the Leeds Regional Hospital Board) will replace the existing obsolete hospital except that two blocks of the old buildings will be retained for some years as wards. The site, of three acres, is near the centre of the city. The starting date has not yet been fixed.

There are 590 beds and large casualty and out-patient departments. The wards are in a single fourteen-storey block facing south, of which the lower four storeys house administrative offices, dining rooms and laboratories. Two floors are allocated to paediatrics. Each ward unit consists of one 20-bed ward, one four-bed ward and six one-bed wards, plus the usual service accommodation. A block to the north contains, on the ground floor, the main kitchen, bulk storage, mortuary and casualty department; on the first floor, the out-patients' department; on the second, the therapy department, x-ray and chest unit, and on the third, the theatres and central sterilising plant. There are seven main theatres and two smaller ones for the casualty department. The main structure is reinforced concrete, on piles with no basement owing to the unsuitable nature of the ground.

Associate architect, P. B. Nash (Leeds Regional Hospital Board). Structural engineers, F. J. Samuely and Partners. Mechanical and electrical engineers, R. W. Gregory and Partners. Quantity surveyors, Davis, Belfield and Everest.

### COMMONWEALTH INSTITUTE: KENSINGTON

### Robert Matthew and Johnson-Marshall

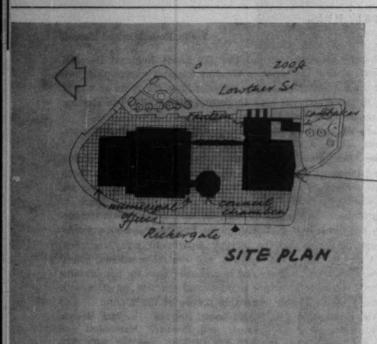
To replace the accommodation used by the old Imperial Institute in Colcutt's building, South Kensington, which is to be demolished to permit expansion of the Imperial College of Science (see A.R. Preview issue, January 1967). The site is a narrow one at the south end of Holland Park, facing Kensington High Street. Construction will begin this spring and will be complete in the summer, 1962.

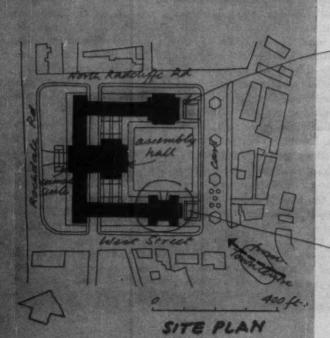
The main building, set back from the street, is square on plan but placed diagonally. It has a roof composed of five hyperbolic paraboloids and contains exhibition space at ground level and in three galleries surrounding a central well partly lit by clerestory windows. Two-storey wings placed at an angle to the main block contain offices, lecture-rooms, library and restaurant in front (facing the entrance courtyard) and a cinema and art gallery at the back.

The structure is reinforced concrete with infill panels of dark brick in the lower buildings and cladding of opaque blue-grey glass in the main block. The roof structure is a mesh of precast post-tensioned concrete ribs, covering an area 185ft. square with only four supports. The outer surface is copper.

Senior architect in charge, P. A. Newnham. Job architect, R. Cunliffe. Exhibition designer, James Gardner. Structural engineers, A. J. and J. D. Harris. Heating and ventilating engineer, L. J. Fowler. Electrical engineers, C. Mackechnie Jarvis and Partners. Quantity surveyors, Franklin and Andrews.

# 3 CIVIC CENTRES





### CARLISLE

Charles B. Pearson and Son

The result of a competition held in 1957. Work is expected to begin early this summer.

The civic centre occupies the whole area between Lowther Street and Rickergate, and the group of buildings is designed to dominate this part of the city. Accommodation includes a multi-purpose assembly-hall to seat 1,000, civic suite with council-chamber, receptionrooms and committee-rooms, municipal offices housing 303 and a canteen. It is planned as three separate units, enclosing an open square entered from Rickergate: the municipal offices and civic suite on the north, in the form of a 10-storey tower to which is attached a 2-storey hollow square: the assembly-hall on the south (to which the canteen is attached), linked to the offices by a covered way; and between them, occupying the north-west corner of the square, the council chamber. This is octagonal in shape, raised on columns and linked to the offices at first-floor level by a bridge. The office block can also be entered from the Lowther Street side. The civic suite and the offices share a central staircase hall, off which is a large top-lit rates hall occupying the central area of the 2-storey block.

Construction is reinforced concrete except for the assembly-hall, which is steel framed. Cladding is mosaic and thin slabs of local stone. Structural engineers, Bolton, Hennessey and Partners. Heating, ventilating and electrical engineers, Donald Smith, Seymour and Rooley. Quantity surveyors, Lay and Partners.

### OLDHAM, LANCS.

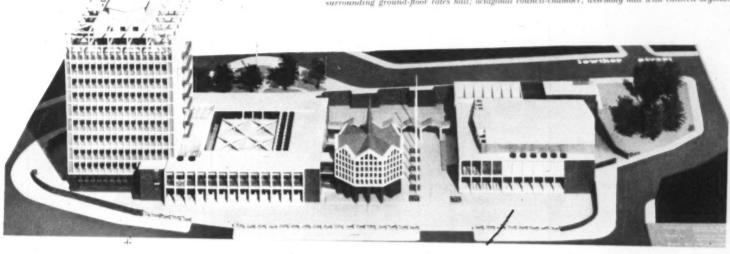
Cecil Howitt and Partners

Consists of an assembly-hall, small concert-hall, council-suite and offices for the town-clerk's, engineer's, health, education and six smaller departments. The site, of about five acres, slopes sharply from east to west and is approached from the town at the south-east corner. No starting date has yet been fixed, but it is hoped to build all but the concert-hall within two years, except for one range of offices (facing Radcliffe Street) which must await the demolition of a factory in 1968.

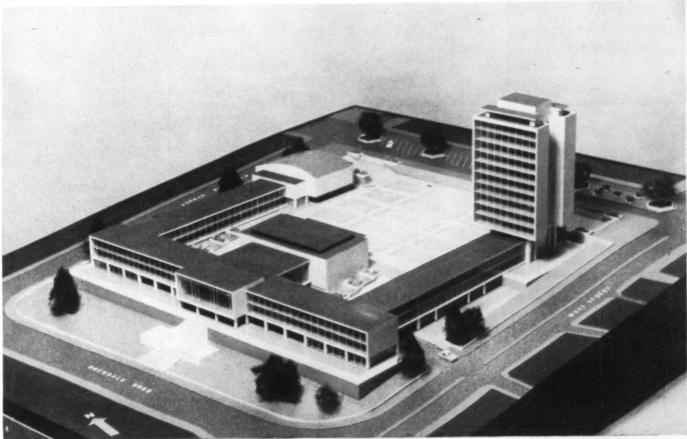
The assembly-hall seats 1,000 and can be let as a separate unit with some of the associated accommodation. The concert-hall seats 500. The council suite includes a council-chamber seating 52, mayoral suite, one large and four small committee-rooms and a dining-room and ante-room which together can form a large dining-hall in association with the assembly-hall. The offices, housing a staff of 525, are planned half in low blocks for easy approach by the public and half in a tower designed to mark the centre from a distance. The slope of the site has been utilized to give certain upper departments direct access from ground level. A large upper-level courtyard is designed to give elbow-room in a densely built-up area. All car-

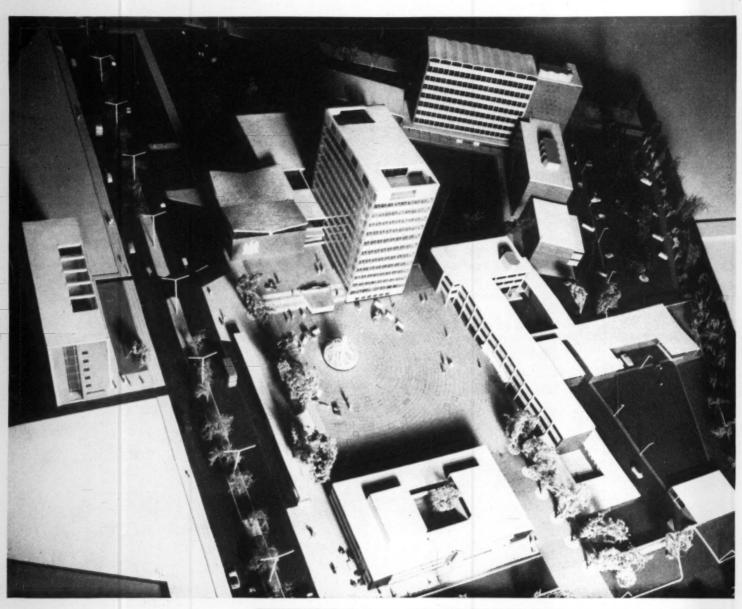
[continued on page 33

Civic centre, Carlisle. The buildings, from left to right, are: municipal office tower; municipal offices surrounding ground-floor rates hall; octagonal council-chamber; assembly hall with canteen beyond.



Below, Oldham civic centre, from the south-west.

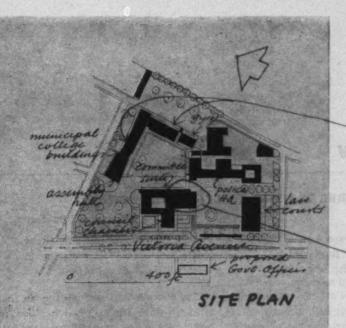




Southend civic centre and municipal college buildings. Above, looking down on the square round which the civic buildings are planned, with the tall block of municipal offices on the far side, the law courts on the near side and the police headquarters on the right. Beyond the latter is the group of college buildings. On the left of the picture is Victoria Avenue, and on the other side of it the new Government office building. Right, from across Victoria Avenue.

### 3. CIVIC CENTRES





continued from page 30]

parking is underground except for a few short-term standing spaces near the offices.

The structural frame is reinforced concrete faced with Portland stone; local stone for paving and terracing.

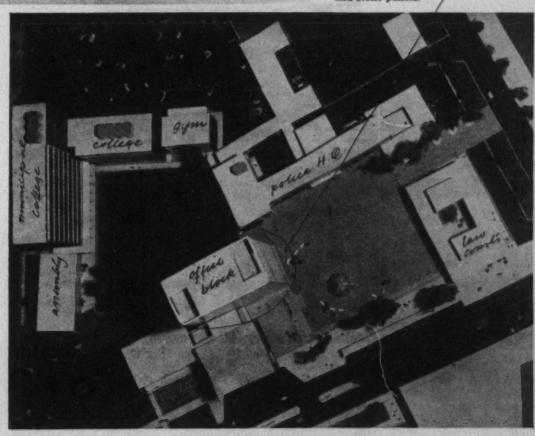
### SOUTHEND-ON-SEA

P. F. Burridge (Borough Architect)

Includes municipal college buildings as well as civic buildings. The site is on Victoria Avenue, which links with the A.127 road to London and with Southend airport and continues through the main shopping-centre to the centre of seaside activity. A large Government office building (also shown on the model) is to be erected nearby. The main block of the college buildings is already nearing completion and the remainder will be started in 1961 and finished in 1964. The office block of the civic buildings is just starting. Most of the remainder will start this year or next and it is hoped to have the whole civic centre finished in five years.

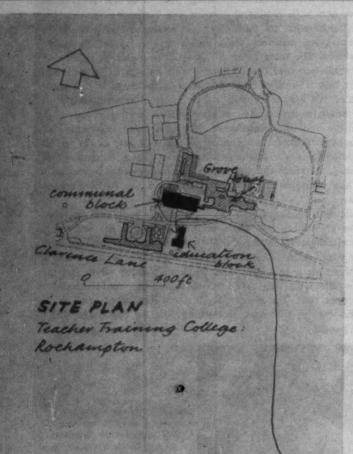
The college buildings consist of gymnasia block, assembly-hall and a teaching block for science, commerce and art. In the group of civic buildings are a 15-storey office block which dominates the whole centre, a council-chamber and a committee-suite, police head-quarters and court buildings. Each group surrounds its own pedestrian square.

Construction is reinforced concrete. The college buildings are faced with silver grey brick or curtain walling painted white with grey glass and vitreous enamel panels. The council chamber is faced with brick, the tower office-block with precast concrete slabs (flint aggregate) between stone mullions, with windows painted white and the committee-suite with stone slabs. Both it and the council-chamber have a copper roof. The police headquarters have grey brick walls and curtain-walling with dark blue panels, and the courts grey brick and stone panels.



Air-view of Southend civic centre, showing also the municipal college (already under construction), far left. On the left of the paved square are the municipal offices, council-suite and council-chamber, on the right the law courts and on the far side the phlice headquarters.

# G FURTHER EDUCATION

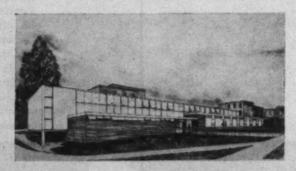


### TEACHER TRAINING COLLEGE: ROEHAMPTON

Norman and Dawbarn

An expansion of the existing Froebel Educational Institute, Grove House, Roehampton, to accommodate 400 instead of 300 students, 44 of the new students being residential. Building began last month and will be completed in August, 1961.

There are new communal as well as educational buildings, the old assembly-hall, dining-room and kitchen (which are too small for the increased number of students) being used for a students' common-room and an art and craft room. The communal block is on the site of existing cycle sheds and garage, giving easy access to the dining-hall from all parts of the college and a screened service-yard to



Above, communal block from the south-west. Right, education block from northwest.



the kitchen, and allowing the assembly-hall, used for music, to be kept away from the teaching rooms. The new education block has two storeys with two lecture-rooms in each and a single-storey wing with tutorial rooms.

The communal block has a reinforced concrete frame for the central area, faced with brick and precast concrete slabs, and load-bearing brick for the kitchen and lavatory wings. The education block has a concrete frame on the south elevation to provide large lecture-room windows and load-bearing brickwork elsewhere.

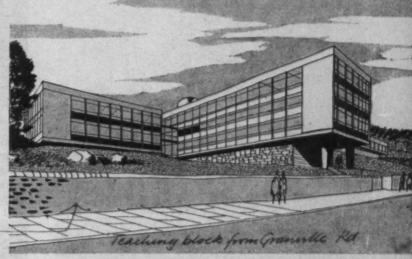
## COLLEGE OF FURTHER EDUCATION: SHEFFIELD J. L. Womersley (City Architect)

In Granville Road, near the new main technical college, on a level site created by the recent excavation of 25,000 tons of coal. Work began in July, 1958, and will be finished in September this year.

traching Communal block
workshop block
Granulle Rd 150 ft

SITE PLAN
College of Further Education:
Sheffield

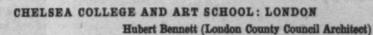
The college provides courses (full and part-time) in science, house-craft, art and allied subjects, typewriting, wood and metal work and various branches of engineering; also recreational and social facilities. It is planned in three main blocks, connected by glazed links and covered ways: a teaching-block (part three-storeys and part two-



storeys), a communal block (containing assembly-hall, gymnasia, dining-rooms, kitchen, library and common-rooms) and a workshop block. The communal block is in the centre to provide a sound buffer between the quiet and noisy areas.

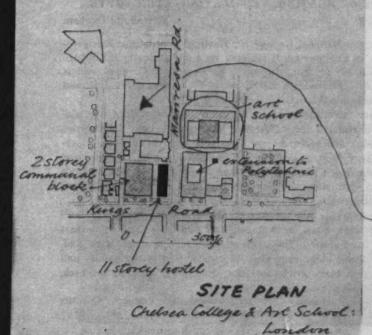
The teaching blocks have an exposed reinforced concrete frame faced with slate and tiles, with brick end panel walls. Windows are steel in hardwood frames. The communal block is a mixture of concrete and steel. The aluminium curtain-wall has either coloured glass or brick infill panels. The workshop block is reinforced concrete with steel roof-trusses. Cross-walls are carried up into the roof where sound insulation is required.

Architect in charge, E. A. Whitaker. Structural engineers, Ove Arup and Partners. Mechanical and electrical engineers, E. A. Pearce and Partners. Quantity surveyor, A. W. Lancaster.



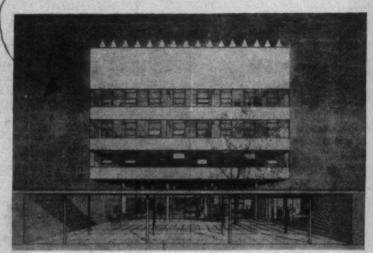
A group of buildings facing King's Road and bisected by Manresa Road, adjoining Chelsea Polytechnic. The latter is to become a college of advanced science and its art school separated from it. The new group consists of a new art school, a chemistry block for the college of science, a hostel for 200 science students, a communal block and a fire-station. Work will begin in a year's time and will be completed early in 1963.

The chemistry block has teaching, research and staff laboratories and lecture-theatres planned round an open court. The rooms facing





King's Road have double glazing. The hostel, eleven storeys high, has an open ground floor. The fourth floor accommodates resident staff and a sick-bay. The remaining floors contain single study-bedrooms. Behind is a single-storey warden's flat with a private garden, and alongside a two-storey communal block with dining-room and kitchen to serve all the students of the college and an assembly-hall to seat 400. It is linked to the hostel by a covered bridge. The art school, for 300 students, is a five-storey block with lower wings, one



End elevation of art school block with top-lit studios on the upper floors.

of which contains the sculpture studios with car-parking for the whole college beneath. The main block has exhibition-space and a dining-assembly hall on the ground floor, lecture-rooms and library on the first floor, the design department on the second and the studios above.

All the buildings have a reinforced concrete structural frame with white mosaic infill panels on upper floors. Ground floor and boundary walls are dark brick.

Schools architect, Michael Powell. Group leaders, B. Le Mare (chemistry block and school of art); I. G. Berresford (hostel). Structural engineer, Senior Structural Engineer, L.C.C. Architect's Department. Electrical engineer, Chief Engineer, L.C.C. Heating engineers, Wingfield-Bowles and Partners.

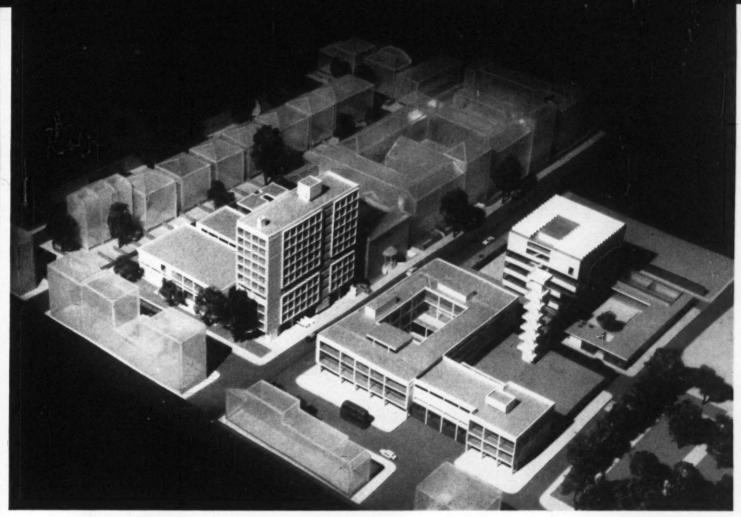
### COLLEGE OF HEATING, VENTILATING, ETC.: SOUTH LONDON Norman and Dawbarn

In full: the National College for Heating, Ventilating, Refrigeration and Fan Engineering. It replaces, on a site at Southwark Bridge Road, S.E.1, the present inadequate premises of the college and is designed for 315 students and 20 staff. Work began last July and will be finished in August.

There are three separate units: a main five-storey block, a single-storey block and a lecture-theatre. Most of the large laboratories (for teaching and research) are at ground level to facilitate movement of heavy test equipment; the remainder are on the first floor of the main block. Heating and other services are of several kinds as aids to instruction and demonstration and teaching plant rooms occur at all levels.

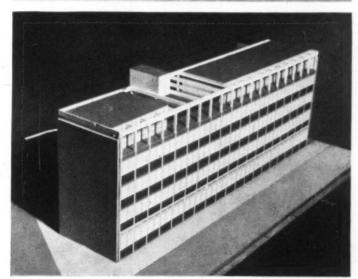
The structure is reinforced concrete. The main block has infill panels of black brick, or buff brick on two sides. The whole east wall has fixed glazing. The single-storey block has black brick cladding, the frame being concealed. The upper part of the lecture hall is faced with black bricks and the lower part, which is set back, with buff bricks.

Mechanical engineers, J. Roger Preston and Partners. Quantity Surveyors, William C. Inman and Partners.





Chelsea college of science and art school, by the LCC architects, seen from across King's Road. The tall black at the corner of Manresa Road is the science students' hostel; behind it is thetwo-storey communal block. On the near side of Manresa Road are the chemistry block, planned round a courtyard, and along-side it, facing down Oakley Street, an LCC fire-station with sculpturally treated hose-drying tower in the yard behind. Beyond this is the art school block—see also facing page. The buildings shown in outline only on the other side of Manresa Road are the present buildings of Chelsea Polytechnic where the art school is now housed.



National College for Heating, Ventilating, Refrigeration and Fan Engineering: top, from the west, with lecture theatre in foreground; bottom, from the south-east showing the facade of the five-storey block facing on to Southwark Bridge Road.



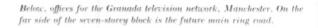
## OFFICE BUILDINGS

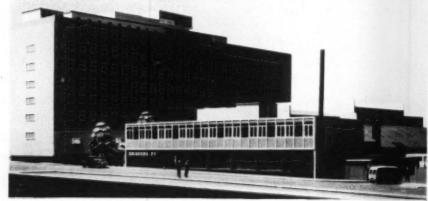


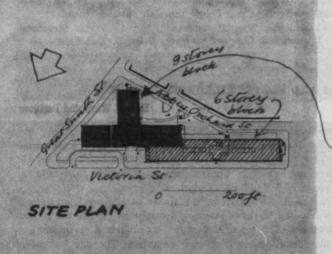
Offices in Victoria Street: the view from Broad Sanctuary, with the corner of Great Smith Street on the left.

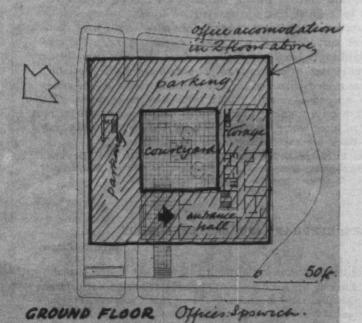


Sales offices at 1pswich: on two storeys raised above an open ground floor containing a car park.









### OFFICES: VICTORIA STREET, LONDON

Ronald Fielding

On a two-acre island site at the Westminster end of the street (that is, at the corner of Great Smith Street). The whole building is let to one tenant and designed for his requirements. Site work began last May; completion is scheduled for March, 1962.

The buildings (the final grouping of which followed negotiations with the L.C.C. and the Royal Fine Art Commission after a scheme with a higher main block had first been put forward) consist of a nine-storey T-shaped block and a six-storey block parallel with one another. In one of the two basements is a garage for 170 cars.

Services are contained in a central reinforced concrete core from which the floors span to external columns, also reinforced concrete, 5ft. apart. The columns are faced with white marble; spandrel panels and the solid end panels with granite.

Engineers, Bylander, Waddell and Partners. Quantity surveyors, E. C. Harris and Partners.

### OFFICES: IPSWICH

### Johns, Slater and Haward

For Messrs. Fison, to accommodate their south-eastern sales division: on an island site, one side of which is a future inner ring road. Construction of three sides of the hollow square on which the building is planned began last August and will be finished in October. The fourth side will follow later.

Except for a few general offices, such as telephone and post room, the ground floor contains only the entrance hall, the office accommodation being on the two floors above. The remainder of the covered ground area is parking space for about 24 cars.

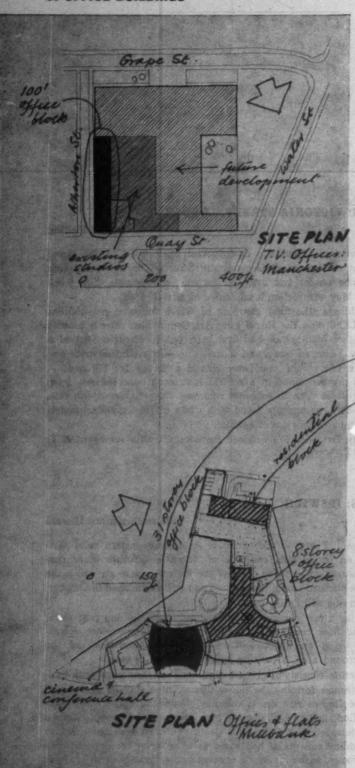
Construction consists of precast reinforced concrete units with twostorey H-frames forming the upper floors. These support prestressed joists. The frames rest on V columns supporting edge-beams combining rolled steel and prestressed concrete casing of a type designed by F. J. Samuely just before his death and used here for the first time. Cladding consists of hardwood units between the exposed concrete H-frames, with aluminium opening lights. Panels below windows are black glass, First floor and roof edge-beams are faced with granite.

Structural engineers, F. J. Samuely and Partners. Heating and electrical engineers, Fisons Engineering Department, Felixstowe. Quantity surveyors, Caston and Porritt.

### TELEVISION OFFICES: MANCHESTER

Ralph Tubbs

For the Granada network, part of their TV Centre. The office block, 100ft. high, is on the Atherton Street frontage of the centre,



facing the future main ring road. Work began last September and will finish next December.

The lower ground floor, on the same level as the existing studios alongside, contains a boiler-house which will eventually serve the whole centre, a viewing theatre with projection-room and film storage. This and the ground floor are connected with the existing buildings, and the reception hall at street level will eventually be the entrance to the whole centre. Above are seven floors of offices, with a small amount of residential accommodation on the roof; also a penthouse reception-room with access to a roof-terrace.

The building has a reinforced concrete frame, with curtain walling with steel-faced infill panels enamelled grey and flank-walls and penthouse in dark brick. On the office floors only the corridor walls are permanent. Services run below the slab between them.

Assistant architects, Miss P. Townsend and I. Urwin. Structural engineers, Truscon Ltd. Quantity surveyor, Brian D. Etchells.

### OFFICES AND FLATS: MILLBANK, LONDON

### Ronald Ward and Partners

Between Lambeth Bridge and the Tate Gallery, overlooking the Thames: for Messrs. Vickers. The scheme consists of a 31-storey office block 380ft. high, an 8-storey Y-shaped office block and an 11-storey (residential block). Construction began last June and is scheduled for completion by the end of 1962.

The layout and the height of the tower block were determined by angles imposed by town-planning restrictions on the north and south boundaries. The tower is designed to provide a visual stop to the cliff-like development further downstream. The site has been kept as open as possible at ground level, offices and flats beginning on the first floor. There is a cinema-conference hall at ground level on the south side of the tower, and restaurants and kitchens in the first-floor podium of the various blocks. The residential block has one floor of ten hotel suites; otherwise 80 two-bedroom and one-bedroom flats. There is parking for about 250 cars on three levels, reached by a spiral ramp cantilevered out from a water-tower.

Construction is reinforced concrete. The office blocks have stainless steel curtain-walling with glass spandrel panels. The airconditioned tower block has double windows, the outer panes being fixed and cleaned externally from power-operated cradles operating on bronze guide-mullions on the face of the curtain-wall. The offices have a suspended acoustic ceiling, with duct space above. The exposed concrete framing is faced with white mosaic except in the residential block where the mosaic is black. Infill panels in the residential block are exposed-aggregate concrete slabs.

Partner in charge, D. H.. Marriott. Senior assistants, R. B. Dowling; G. D. Wimbourne. Engineer, G. W. Kirkland (of Travers Morgan and Partners). Quantity surveyors, Franklin and Andrews.

### OFFICES: ELEPHANT AND CASTLE, LONDON

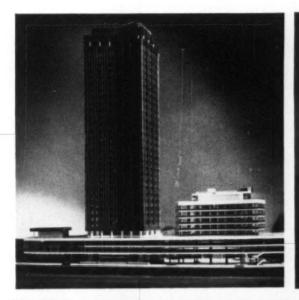
Ernő Goldfinger

Part of the redevelopment of this traffic intersection and surrounding buildings by the London County Council, following war damage. The section illustrated, bounded by Newington Causeway, Rockingham Street, Tarn Street and the Trocadero cinema, is known as Site 2. It comprises 72,000 sq. ft. and is laid out with three office blocks parallel to the main axis of the whole scheme and staggered in plan to form an enclosed pedestrian courtyard in conjunction with the northern facade of the cinema. There is basement and surface car-parking. Construction will begin this year.

Two of the blocks are seven storeys high, and the third thirteen.

[continued on page 43]

HOTELS RESIDENCE





Offices and flats at Millbank, London, overlooking the Thames: left, from the east (the side facing the river), and night view from the south-west; below, a detail from the south-west showing the open courtyards and gardens between the buildings. The residential block is on the extreme left and the cinema-conference hall at the foot of the tower on the right.

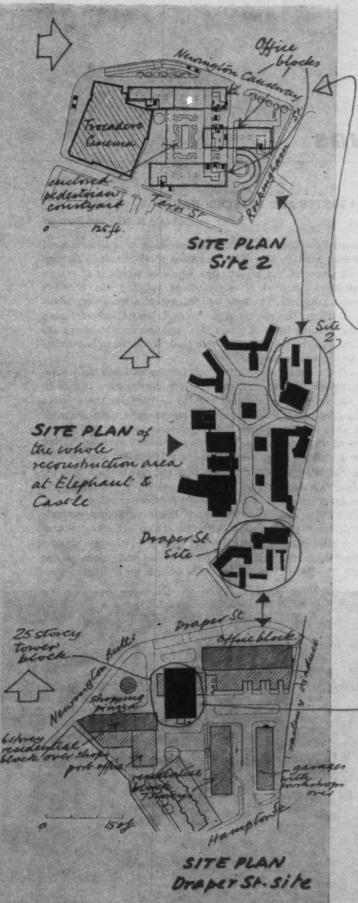


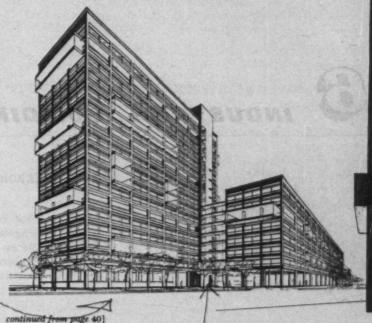


5. OFFICE
BUILDINGS



The LCC redevelopment scheme at the southern (Draper Street) end of the Elephant and Castle area, comprising, besides offices, housing, shops and other buildings. Above, from the south-east. On the right, on the far side of the main traffic-way, is the classical portico of the restored Metropolitan Tabernacle. Beyond it is the Lordon School of Printing. Just off the right-hand edge of this picture, at the northern end of the same reconstruction area, the scheme by Ernő Goldfinger, also illustrated in this issue and shown in the line drawing opposite, is sited—see layout plan. Right, the LCC Draper Street scheme from the north-west. See also the frontispiece to this issue.





One of the latter has shops or showrooms on the ground floor, as well as two banks and a public-house reinstated from pre-war. The three office blocks are linked by bridges. The blank west facade of the cinema, exposed by the demolition of existing buildings, is faced by a structure designed to carry illuminated advertisements.

The buildings are reinforced concrete structures with the frames exposed and bush-hammered. Ground floor columns are faced with granite. Modelling is given to the facades by projecting some sections to form bay windows and recessing others behind the structural frame to form colonnades.

Assistant architects, J. Winter; J. Blacker.

## OFFICES, HOUSING, ETC., SOUTH-EAST LONDON

Hubert Bennett (Architect, London County Council)

In Draper Street: comprising the southern sector of the Elephant and Castle reconstruction area (see also above). The development illustrated here consists of offices, 200 flats and maisonettes, shops, pub, post-office, garages (including an underground car park) and an occupation centre with workshops. Work below ground has begun. The remainder will begin early this year. The office block will be completed in 1962 and the other buildings in 1963.

The office block is placed at right-angles to the railway viaduct which forms the eastern boundary of the site, and a residential block with shops on the ground floor and penthouse flats on the roof is set back at the south end of the 25-storey tower to form a small shopping piazza away from the main road. This is laid out with fountains and sculpture, and may be embellished with illuminated advertisements on the blank north end of the tower. The south front of the tower overlooks a small green space with sunken children's playground and covered play-space connected by ramps to the main levels.

Construction is reinforced concrete, mostly precast. The exposed frame has a blue granite aggregate, bush-hammered. Cladding is precast slabs with grey granite aggregate. On the tower block storeyheight slabs are finished with white Sicilian marble slips.

Deputy architect to the council, F. G. West. Architect in charge, Edward Hollamby. Job architect, D. A. Woods. Consultant artist designer, William Mitchell. Structural engineers. F. J. Samuely and Partners. Heating, ventilation and electrical engineers, Chief Engineer's Department, L.C.C. Quantity surveyors, H. Trinick and Partners.

# 6

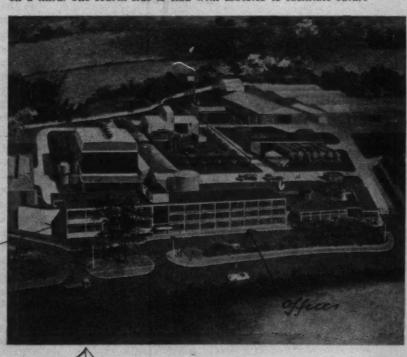
## INDUSTRIAL BUILDINGS

# LABORATORIES AND OFFICES: HARSTON, CAMBS. Edward D. Mills and Partners

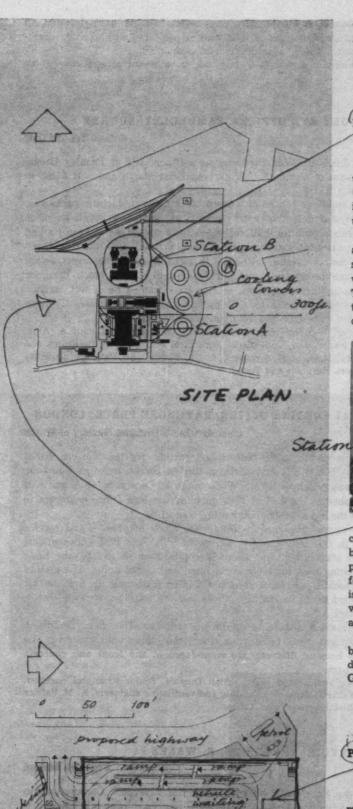
For Fisons Pest Control, Ltd.: the final stage of a development along the road frontage of the firm's existing spray-chemicals factory. The earlier stages of the project (the whole of which is shown in the perspective) consisted of an ablutions building and a works entrance and gatehouse. The new building replaces temporary laboratories and offices. The site is on the main London-Cambridge road (A10) about 5 miles south of Cambridge, and the new buildings are between the existing buildings and this road. Work began last spring and will be finished in June.

Offices for the firm's headquarters and factory staff and the laboratories (analytical organic and chemical engineering) are housed in a single block. A pilot plant building (to be used for the erection of various pilot plants for experimental purposes) at right angles to the main block is separate from it, but connected to the main building by a covered way and bridge. The main block is of even height, but the office portion is three storeys and the laboratory portion two, owing to the latter's greater room-height and to the fact that the ground floor is raised 3ft. 6in. above ground level to simplify the arrangement of chemical drains from the laboratories.

The main office and laboratory block has a reinforced concrete frame with brick panels below windows, which are purpose-made metal. The pilot plant building is steel framed to give an uninterrupted floor area, with brick walls on two sides and patent glazing on a third. The fourth side is clad with asbestos to facilitate future



lats-



alders gate St

GROUND FLOOR

extension. There is a car-park in front of the new buildings, screened from the highway by a belt of trees and shrubs.

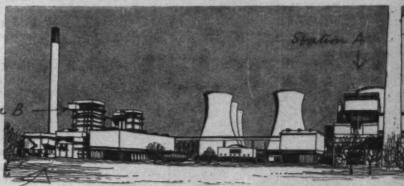
Architect in charge, Philip E. Bell. Engineers, Ove Arup and Partners. Quantity surveyors, Leslie W. Clerk and Partners.

#### POWER STATION: WILLINGTON, DERBYSHIRE

Farmer and Dark

For the Central Electricity Generating Board, to supply power to the national 132 and 275 KV grid systems. Two adjoining stations (both coal-burning) each have a capacity of 400 megawatts. Station A is already built (completed last year). Station B, illustrated here, is under construction and will be finished in the summer, 1962.

It consists of two sets, each comprising a 200 megawatt turboalternator and associated plant. The two boilers that provide the steam pressure are arranged in line alongside the turbo-alternators, with the reinforced concrete fuel bunkers placed between them. These are exposed, but the areas above the conveyors and below the low-level weighers are closed in. Ducting from boilers and precipitators connects with a single free-standing reinforced concrete



chimney 425ft. high. The two turbines are housed in one building, but the boilers are completely exposed; so are the other items of plant such as precipitators, dust collectors and fans and the transformers associated with turbines and plant control. Bright colour is used to differentiate the kinds of plant. Ancillary buildings include workshops, stores, offices, canteen, control-room, three pumphouses, ash-plant, locomotive shed, garages, switch-rooms, etc.

These are built with exposed reinforced concrete frames with brick, aluminium and glass cladding. The turbine house is clad with dark purple-grey brick at low level and aluminium sheeting above. Glass areas are aluminium bar patent glazing.

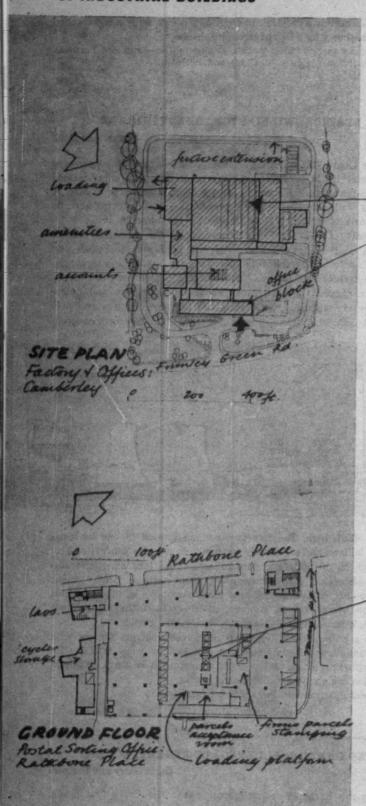
Engineering consultants, Ewbank and Partners.

# PARKING GARAGE: ALDERSGATE STREET, LONDON Oscar Garry and Pariners

Facing the Barbican redevelopment area: the City's first public multi-storey car-park. Work begins this month.

There is parking space for about 500 cars on a staggered floor system with ramp approach, together with a car-sales showroom, filling-station, service area in the basement and offices. Initially both in-going and out-going traffic will use the Aldersgate Street entrance but later an exit will be formed in a new road at the rear. Customers will park their own cars under the supervision of attendants.

The structure is reinforced concrete, with prestressed T-joist floors spanning between longitudinal beams which are supported internally



on columns and externally on precast framing units forming an open grille. The areas of solid walling are faced with exposed aggregate slabs. There is no mechanical ventilation.

Architect in charge, G. J. Hawkins. Quantity surveyor, Michael C. G. Seward.

#### FACTORY AND OFFICES: CAMBERLEY, SURREY

Clifford Tee and Gale

For Johnson's Wax Products, on a 10-acre site at Frimley Green, south-west of Camberley. Work began last March and will finish in August.

The buildings consist of a main block for manufacture, packaging, storage and despatch, with research at mezzanine level, an office block an accounting hall separated from the offices by a patio and an amenities block (containing canteen, first-aid, etc.) linked to them.

The factory is steel-framed with monitor roof-lights over certain areas and brick panel walls. The two-storey office block, designed to take another floor later, is also steel framed on a 10ft. module without internal columns, with precast concrete floor beams. Columns are faced with stone and infill panels are brick.

Partner in charge, Eric A. Day. Executive architect, Dennis A. Arch. Group leader, Jan K. Siedlecki. Structural engineers, C. B. Brown and Partners. Mechanical engineers, G. H. Buckle and Partners. Quantity surveyors, Reynolds and Young.

# POSTAL SORTING OFFICE: RATHBONE PLACE, LONDON Chief Architect's Division, Ministry of Works

A new sorting office (letters and parcels) for the Western postal district. The site is just north of Oxford Street, between Rathbone Place and Newman Street. Work began in December, 1958, and will be finished at the end of 1962, enabling the Post Office engineers to install the mechanical equipment by early 1963.

The square five-storey building has goods lift, chutes and service stairs in the centre and is connected to a new Post Office underground station beneath. There is a sub-basement garage, the basement being used for mechanical plant and bag-cleaning. The ground floor contains a covered yard and loading platforms, the first, second and third floors the sorting offices and the top floor welfare accommodation.

The main structure is reinforced concrete. The main (Rathbone Place) frontage is faced with stone; the others with concrete. The towers housing lifts etc. are stone-faced at the front and concrete at the back.

Senior architect in charge, Alan Dumble. Senior structural engineer, W. J. Purcell. Mechanical heating and ventilating engineers, A. M. Palmer and Chief Engineer, Post Office.

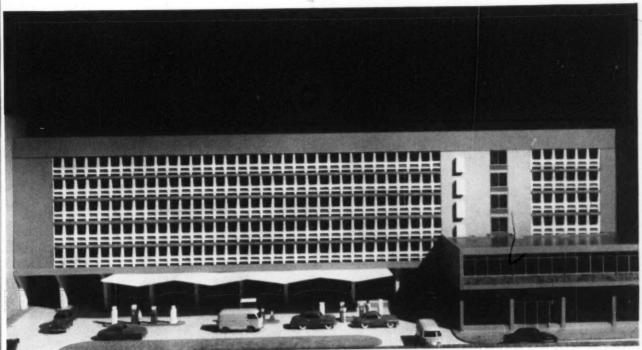
#### RESERVOIR: TRYWERYN, N. WALES

Frederick Gibberd

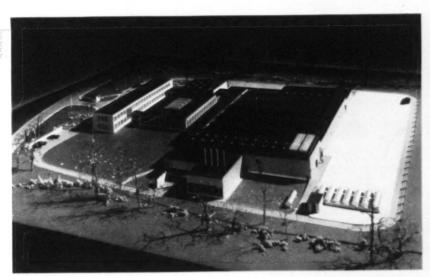
In the Snowdonia National Park, for Liverpool Corporation; to increase that city's water supply. The reservoir, formed by constructing an earth dam across a narrow part of the Tryweryn valley, covers 800 acres. The landscape problems created range from the relation of the new lake to the established landscape, posing problems of changing land-use, earth-form and plant material, to the reinstatement of scarring from the construction. Road work will begin this year and the whole operation take about three years.

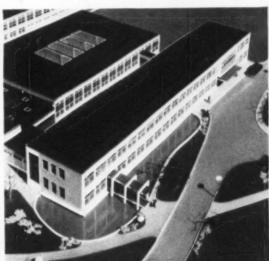
The dam is curved on plan to fit the valley sides. It has a shallow slope of about 1 in 3 and its upstream face is protected against wave

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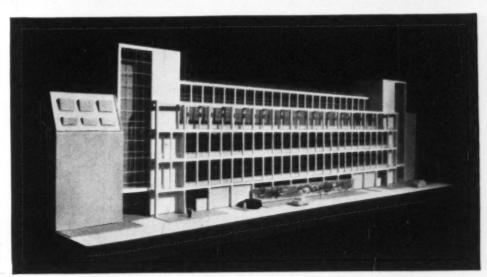


Public parking garage facing the Barbican redevelopment area in the City of London. Architects: Oscar Garry and Partners.





Factory and offices at Frimley Green, Camberley, Above left, the whole scheme from the air, with the office block alongside the approach road on the extreme left of the picture. Above right, close-up of office block from the entrance side.



Right, postal sorting office in Rathbone Place, London, with loading facilities on the ground floor and welfare accommodation on the top floor.

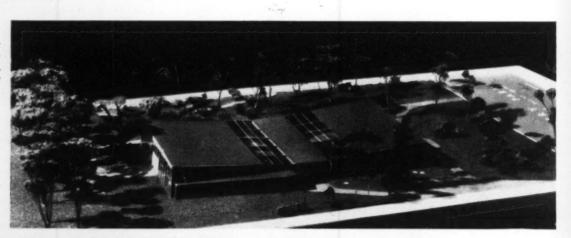


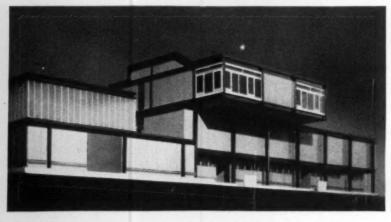
Above, Tryweryn reservoir, North Wales; architect, Frederick Gibberd. Looking across the reservoir, with the draw-off tower in the foreground and overflow bellmouth and car-park in the background.

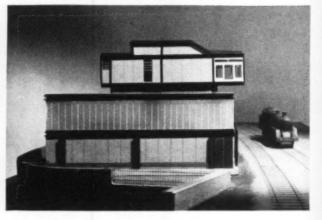
#### 6. INDUSTRIAL BUILDINGS

Right, hydraulics research building at Howbery Park, Wallingford, covering two concrete wave-basins.

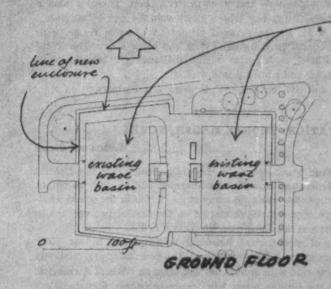
Below, two views of the railway signal box at Manchester. The projecting upper storey contains the control room.

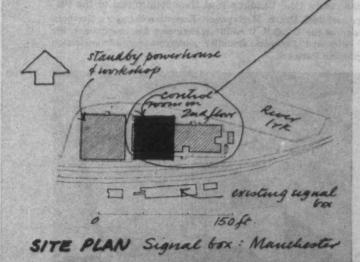






reservoir Controls Trygeryn.





continued from page 46]

action by layers of natural rock. A number of buildings house hydraulic and electrical machinery. The traw-off tower, drum-shaped and with a conical roof, is the inlet of the water-tunnel; here the flow of water is regulated. It has a wide balcony with continuous windows over the water for maintenance purposes and as a viewing-platform. It is faced with Penmaenmawr stone and its reinforced concrete roof is covered with mosaic. The rectangular control-house near the toe of the dam on its downstream side houses turbines and electrical gear. Electricity is generated from water discharged from the draw-off tower. The control house has stone walls and a copper-covered roof. Alongside it is the stilling basin—a stone-faced concrete container to disperse the energy of the turbulent water discharging from the tunnel-mouth before it is led into the original river bed.

Water engineer, J. H. T. Stilgoe (Liverpool Corporation). Consulting engineers, Binnie, Deacon and Gourley.

# HYDRAULICS RESEARCH BUILDING: WALLINGFORD Chief Architect's Division, Ministry of Works

At Howbery Park, the Hydraulics Research Establishment on the banks of the Thames: to cover in and protect from rain, wind, icing and falling leaves the two existing concrete wave-basins used in research on the siltation of rivers and harbours and allied problems, and thus avoid interruption of service. Construction will start in April and finish by the end of the year.

An uninterrupted span across the wave-basins was essential, with enough height for the suspension of cameras. This is achieved by a timber-framed structure on concrete foundations. The framing system (of Swedish origin) is based on an I-beam built up with laminated flanges of relatively small timbers and with a web of two layers of diagonally opposed boarding. The walls of the framework are clad with cedar boarding and the roof with diagonal boarding and felt. Lighting, designed to avoid sun-glare, is through areas of translucent sheet in the end walls and parts of the roof. Several existing small insulated research rooms are also enclosed within the new structure.

Senior architect in charge, O. P. Carver.

#### RAILWAY SIGNAL BOX; MANCHESTER

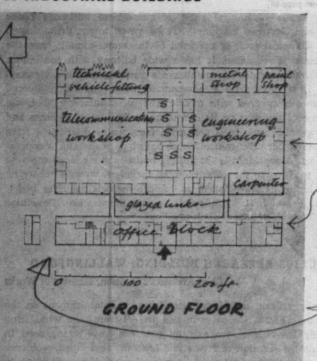
W. R. Headley (Architect, Midland Region, British Railways)

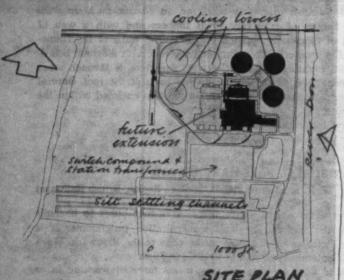
A prototype for a new range of power signal boxes to be built as part of the Midland Region's modernization programme. It is built over Victorian brick arches at the edge of the River Irk. Work began last September and will be finished in June.

The ground floor contains amenity rooms for staff working in or near the signal box. The first floor, which is mechanically ventilated with filtered air, houses the electronic signalling equipment. On the second floor is the control-room with a mess adjoining. West of the box is a separate building comprising workshop, stand-by powerhouse and an unroofed compound for compressed air cylinders and water tanks. The control-room has a part-raised ceiling to take an indicator-panel showing the layout of tracks and signals. This is shielded from direct sunlight and illuminated by a low-level source in the sloping ceiling. Also in the control-room is a station announcer's cabin, constructed as an independent box with rubber insulation.

Both signal box and power-house are welded steel frame structures with precast concrete floors and sheet steel roofs. The cladding, which fits behind the columns and runs between rolled steel channels, consists of panels faced with polyester fibre glass on a foamed core.

Designed under the direction of A. N. Butland, chief civil engineer, Midland Region.





#### RESEARCH BUILDING: GATWICK AIRPORT

Yorke, Rosenberg and Mardall

For the Telecommunications Engineering Establishment, Ministry of Transport and Civil Aviation: To co-ordinate the design of, and research into the construction and maintenance of, ground radar equipment. The site is near the old terminal building. Construction starts next month.

The building consists of a two-storey office block and a workshop block, joined by glazed links. The office block also contains laboratories, canteens, a library and conference-rooms. The workshop block has telecommunication and engineering workshops, with auxiliary



stores, offices, paintshops and a carpenter's shop. There is also a technical vehicle fitting bay where radar vehicles can be serviced.

The office block has an exposed reinforced concrete frame, with concrete block infill on the ground floor and brick above. The workshop block is steel, with portal monitors. Cladding is asbestos with perimeter glazing and a brick plinth wall.

Consulting and civil engineers, F. S. Snow and Partners.

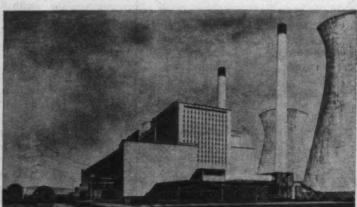
#### POWER STATION: THORPE MARSH, YORKS.

Watson and Coates

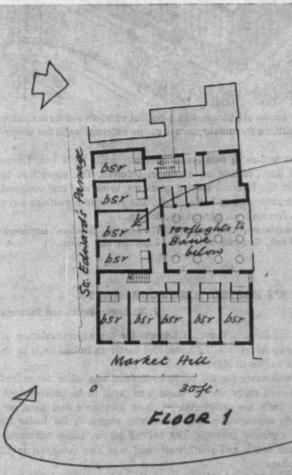
On marshland about ten miles from Doncaster: for the Central Electricity Generating Board. A coal-burning station with an output of 1,100,000 kilowatts—more than any other station in the world whatever its source of power. Work started on the first of two sections in April last year and should be completed early in 1963.

The group of steel-framed buildings is dominated by six 350ft. cooling towers and two 500ft. chimneys. The remainder are relatively light structures clad with aluminium and glass on bases of dark brick. The ends of the turbine house have concrete panels. Elevations are based on a 5ft. module, which sets the size of these panels and of the windows. Bright colours are used on the external electrical gear. The administrative buildings look south over a landscaped area with settling ponds. Coal handling is at the opposite end of the site.

Landscape architect, Mrs. S. M. Haywood. Executive engineers, Northern Project Group of the C.E.G.B. Consulting engineers for foundations, Sir Alexander Gibb and Partners. Quantity surveyors for administration block, Higgins and Partners.



# HOSTELS AND HOTELS



#### UNDERGRADUATE ROOMS: CAMBRIDGE

Architects' Co-Partnership

For King's College, on a site in the Market Square at the corner of Market Hill and St. Edward's Passage, replacing two existing buildings, one 15th century and the other 18th. Work will start this summer and will be completed in two years.

The ground floor and basement accommodate a bank. The upper floors provide 21 undergraduate bed-sitting rooms, Construction is

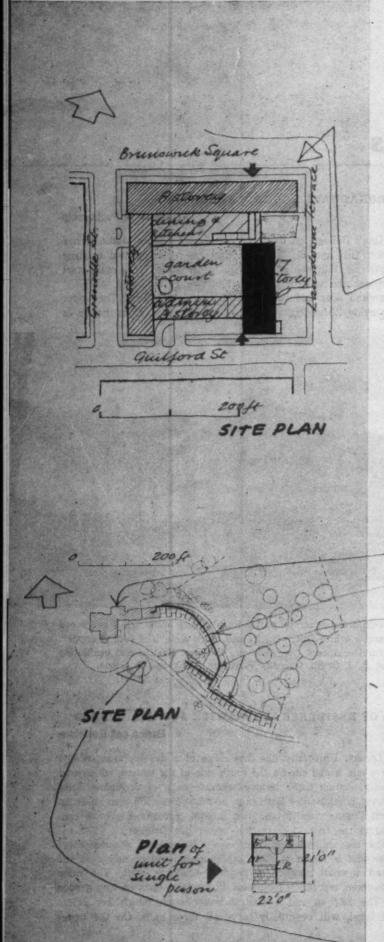


partly reinforced concrete; partly load-bearing brick. Walls are faced with narrow white Dutch bricks and black slate. The roof is copper. Structural engineers, Ove Arup and Partners. Heating and ventilating engineer, A. J. Smith. Quantity surveyors, Monk and Dunstone.

#### HALL OF RESIDENCE: BRUNSWICK SQUARE, LONDON Easton and Robertson

For London University, the first stage of a development scheme for the whole island site on the south side of the square, which will eventually contain three largely separate halls of residence. This, the International Hall of Residence, accommodates 270 men students. Nineteen Commonwealth, and two foreign, governments have contributed to the cost. Construction began last October.

Besides the student study-bedrooms, the building accommodates a senior and a junior warden, other administrative and domestic staff and a small number of resident academic staff. The main common-room, recreation room and dining-room open on to a garden court. The kitchen and a central boiler-house, which are below . ground level, will eventually serve all three halls. On the upper





floors, service rooms are planned as a central core, served by a double corridor, permitting the maximum use of the external walls for study-bedrooms.

The main structure is reinforced concrete, built as a box frame above ground floor, resting on a grid of columns. The elevations to the square and the internal garden court are brick and are designed to accord with surrounding Bloomsbury. The two end elevations have precast slabs forming permanent shuttering.

Structural engineers, Ove Arup and Partners. Services engineers, Brandt and O'dell. Quantity surveyors, Langdon and Every.

#### OLD PEOPLE'S HOSTEL: RINGWOOD, HANTS.

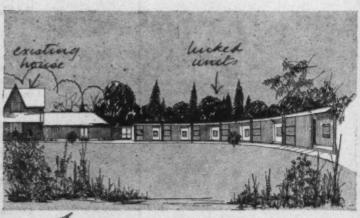
J. M. Austin-Smith and Partners

For the R. H. Russell Trust: a scheme for the accommodation of old people partly in an existing house and partly in linked units in its grounds. Work begins in May.

The house will cater for the partially invalid and other dependent people; the linked units are for those who wish to be independent. Although the units are self-contained, their occupants can, however, reach the main dining-room and community rooms in the house by means of an enclosed passage. The curved layout takes advantage of views to the south and south-west, and was also designed to fit into the landscape.

Construction consists of brick cross-walls with timber-framed loadbearing partitions and front and rear walls. Timber roofs are sheathed in copper.

Partner in charge, Geoffrey Salmon. Assistant in charge, John Porter.

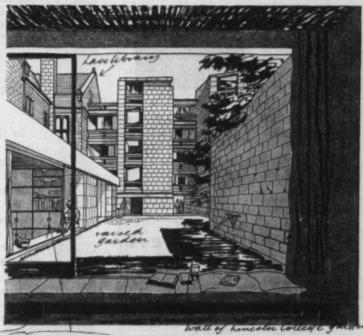


#### UNDERGRADUATE ROOMS: OXFORD

Powell and Moya

For Brasenose College, on the western boundary of the college site, adjoining Lincoln College. Work began last July and will finish in September.

Two areas of ground were available, one about 60ft. square and the other 110ft. long but only 35ft. wide. Both were surrounded by stucco Georgian and 1900 Gothic buildings. In the square area is a four-storey building with a penthouse containing 25 bed-sitting rooms. Its irregular outline was determined by the height and placing of the surrounding buildings and the possibility of some good views, especially over the gardens of Lincoln College. Most rooms have windows facing two directions. In the narrow area is a group of



single-storey pavilions each containing one or two bed-sitting rooms (seven altogether), approached from small entrance courts and opening on to private courts or gardens.

Load-bearing brick walls are faced with Portland stone. Windows are aluminium with precast concrete transomes and cills (white Norwegian quartzite aggregate) and lead-faced panels. The rooms are centrally heated from an existing boiler-house.

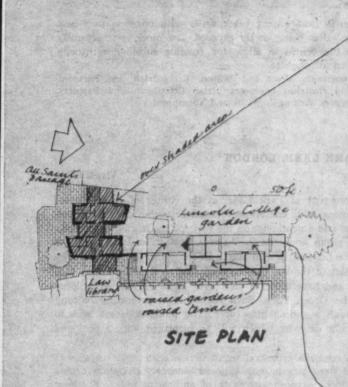
Assistant architects, D. Acton Stow, Robert Huddleston, Richard Burton. Engineers, Charles Weiss and Partners. Quantity surveyors, Davis, Belfield and Everest.

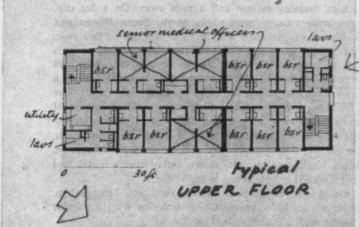
#### MEDICAL OFFICERS' ROOMS; DONCASTER

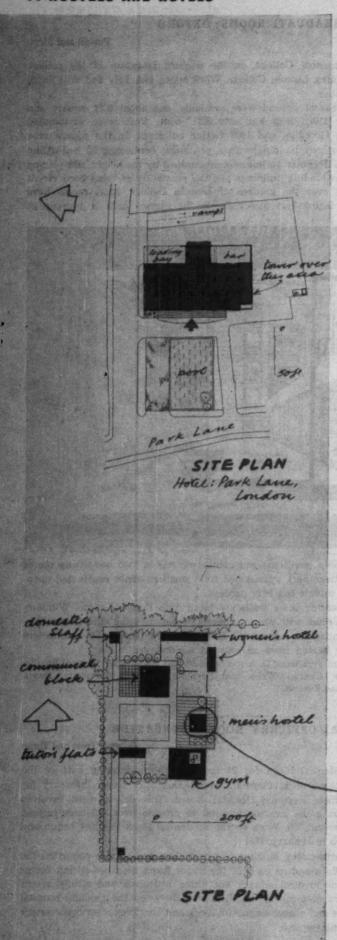
George, Trew and Dunn

A residential block for 24 medical officers forming part of the second phase of development at the Doncaster Royal Infirmary for the Sheffield Regional Hospital Board. This development involves reorganizing the existing hospital to provide over 800 beds instead of the present 330. Work on the residential block has just begun and will finish in January, 1961.

The three-storey building has recreation and service rooms on the ground floor and on each of the upper floors nine bed-sitting rooms for junior medical officers and three bedrooms and sitting rooms for senior medical officers. It is sited between the existing hospital buildings and a new diagnostic block and straddles a service corridor connecting the two.









Construction is load-bearing brick walls with concrete floor and roof slabs, the latter being partly exposed. The block is structurally divided near the centre to allow for possible subsidence through coal-mining beneath the site.

Structural engineers, Scott and Wilson, Kirkpatrick and Partners. Mechanical and electrical engineers, Brian Colquhoun and Partners. Quantity surveyors, Arthur J. Willis and Thompson.

#### HOTEL: PARK LANE, LONDON

Vivien Pilley

In the lower part of Park Lane, at the corner of Brick Street. It has 270 rooms, plus conference rooms, restaurants, bars, underground garage and a penthouse on the roof for the managing director of the hotel group financing it. Work will start in June and it is planned for the hotel to open on May 1, 1962.

The high part of the building is orientated so that the rooms face east or west and have either a view over Hyde Park or an oblique view over the Green Park. Each room has a projecting balcony reached through a sliding glass door. The building is set back to provide a traffic drive-in, which will be furnished with a pool and sculpture.

Reinforced concrete cross-wall construction with wall surfaces of reconstructed stone panels with exposed blue clay chippings or (on the ground floor) exposed aggregate of anthracite nuts. Entrance panels are green Italian marble.

Engineers, Clarke Nicholl and Marcel. Quantity surveyors, Cyril Sweett and Partners.

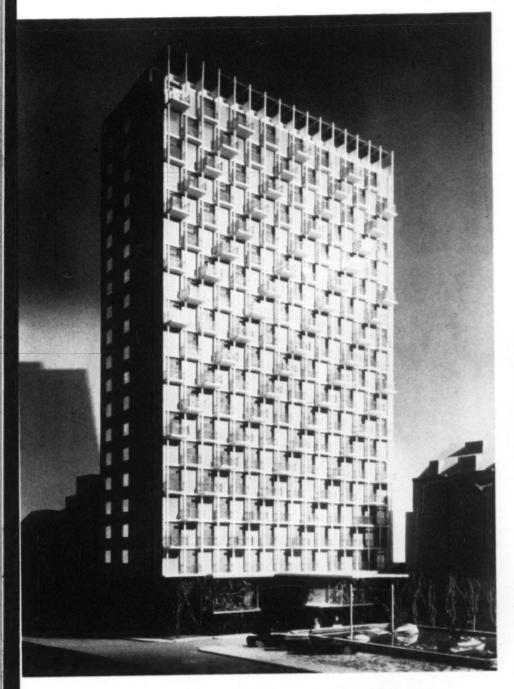
## STUDENT TEACHERS' HOSTEL: PORTSMOUTH Gollins, Melvin, Ward and Partners

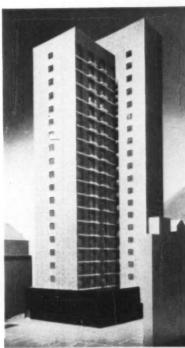
For the Portsmouth Education Committee, to house students attending the teachers' training college half a mile away. On a flat site, bounded by a wide estuary, with views of the South Downs and towards the Solent. Construction will begin at the end of this year.

The buildings look south and east over the playing-fields towards the sea, and to relieve the uniformity of the flat landscape and surrounding suburbs have a dominant element in the shape of a thirteen-storey block containing the 96 men's bed-sitting rooms. The remaining buildings are of one and three storeys. They include 54 women's bed-sitting rooms, joint dining and social facilities, accommodation for tutorial and domestic staff and a teaching gymnasium, close to the playing fields, which can also be used for recreation. The communal block separates the men's and women's hostel and has direct but screened service access to the kitchens.

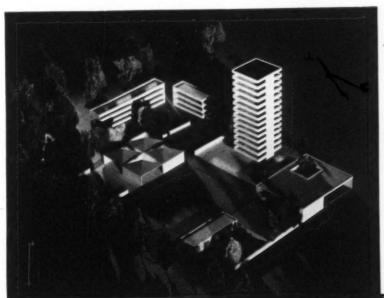
The tall block is of reinforced concrete cross-wall construction. The remainder are of brick cross-wall construction with a tubular steel space-frame roof to the communal block.

Assistant architects, B. J. Mayes; M. G. Carr.

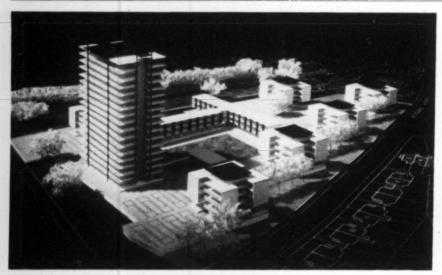




Above, hotel in Park Lane: left, the main front, set back behind a drive-in forecourt; right, from the back. See also the cover of this issue.



Student teachers' hostel at Portsmouth from the south-west. The thirteen-storey tower contains the men's bed-sitting rooms.

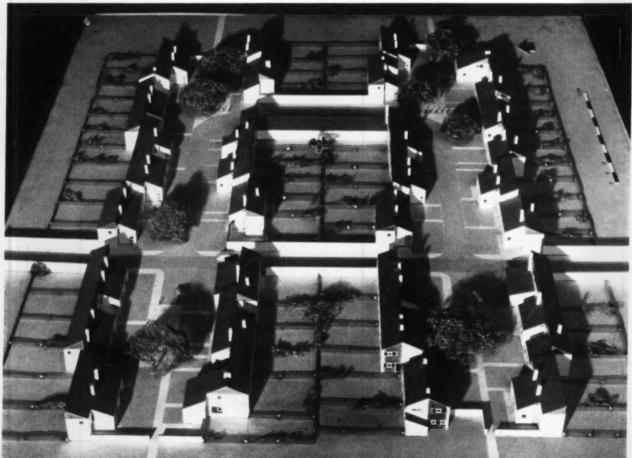


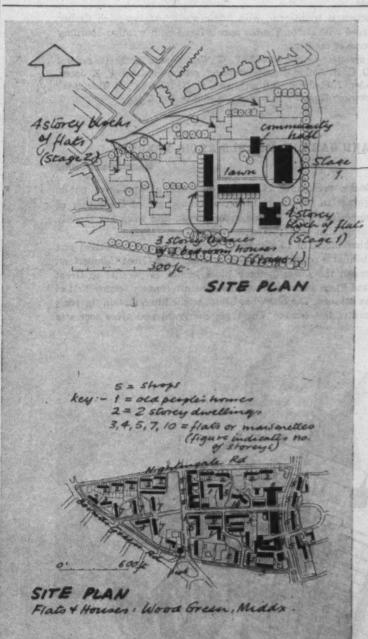
Above, housing at Camden Town for St. Pancras borough council, including a seventeen-storey tower to be built as part of the first stage.



Right, flats and houses at Wood Green, Middlesex.







#### HOUSING: CAMDEN TOWN, LONDON

#### J. M. Austin-Smith and Partners

For St. Pancras Borough Council; an area of seven and a half acres to be developed in two stages. No starting date has yet been fixed.

The first stage makes use of bombed and otherwise open areas, avoiding the need to displace existing occupants until later. It is designed to read as a complete scheme pending the construction of the second stage. The replanning of the area has involved the elimination of all through traffic routes. The first stage consists of a 17-storey block containing 128 dwellings (two-bedroom, one-bedroom and one-room flats), one four-storey block containing 16 dwellings (three-bedroom and two-bedroom flats), two three-storey terraces of four-bedroom houses each with a small walled garden and a community hall and laundry. The second stage will provide five more four-storey blocks of flats.

The tall block has a reinforced concrete frame. The other buildings are load-bearing brick.

Partner in charge, P. J. Lord. Assistant architect, J. Chitty.

#### FLATS AND HOUSES: WOOD GREEN, MIDDLESEX

A. J. Rebbeck (Borough Engineer, Wood Green)

In Commerce Road. Only two of the blocks of flats, of seven and four storeys, have as yet been designed in detail, but it is expected that the remaining seven-storey blocks will be identical with the first. Work on the two blocks will start this year. It is planned to have the whole scheme finished by 1975.

The two blocks contain 44 flats, in an equal proportion of twobedroom and three-bedroom flats. They have reinforced concrete frames and floors, the latter of the 'plate' type to eliminate beams within the flats. External walls are brick, with panels of curtain walling. The houses are of brick cross-wall construction. The flats have under-floor heating in living-rooms and halls.

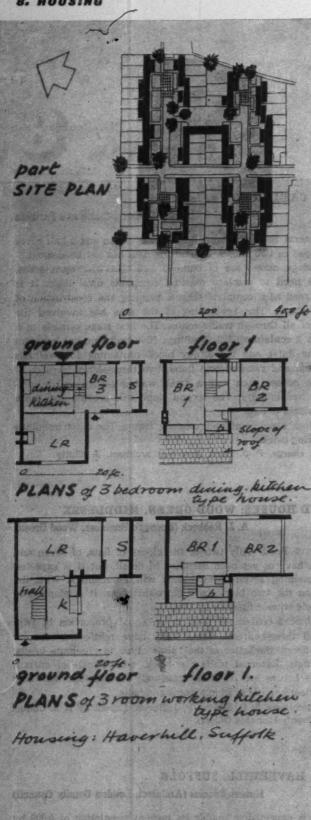
Assistant architects, S. G. Smith; P. J. Brown. Layout by B. J. Collins (Middlesex County Planning Officer).

#### HOUSING: HAVERHILL, SUFFOLK

#### Hubert Bennett (Architect, London County Council)

The town is expected to double its present population of 5,000 by expansion under the Town Development Act. This housing, for families coming from densely populated parts of London and designed for social reasons with houses of different sizes closely mixed, is in three areas on the fringe of the town, on land at present open. The first 100 houses were completed last autumn, 52 more were then started and will be completed in November, and the remaining 140 will be started in March and will be completed in October, 1961.

Through access from front to back was required, and this has been



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achieved both by planning in pairs and by an L-shaped plan with passage through the narrower part. Although houses of different sizes adjoin and reveal their differences by their fenestration and by the size of certain elements, other elements, certain dimensions and roof slopes remain constant. They are linked in various ways, including the staggered row in which the spine of one house becomes the front wall of the next. The layout is of the Radburn type, with the houses grouped round closes of varying design. Where the site is steep, the rows of houses follow the contours, forming long, narrow closes. Garage space and paved parking areas (where children can also play under supervision) take the form of a secondary branch off the close.

Construction is traditional, with brick walls and low-pitch timber roofs, covered with slates. Timber panels faced with weather-boarding occur in some of the houses.

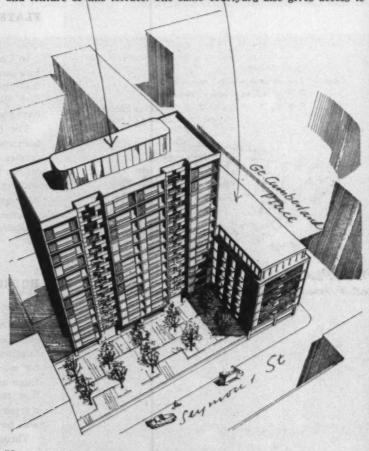
Deputy architect to the council, F. G. West. Senior architect, general division, D. C. H. Jenkin. Deputy architect, general division, P. E. Jones. Group leader, J. Stedman. Job architects, E. G. Ribet; C. H. Davidson; M. N. Pickering. Quantity surveyors, Stockings and Clark.

#### FLATS AND GARAGE: MARBLE ARCH, LONDON

Manning and Clamp

Two blocks, containing 74 luxury flats and a three-level public parking garage in the basement, on a bombed site at the corner of Great Cumberland Place and Seymour Street. Site work has already begun. Completion is expected in the summer, 1961.

the higher block of 13 storeys, is parallel to Seymour Street and set back behind a courtyard. This is reached from Great Cumberland Place through the lower a-storey block, which is parallel to Great Cumberland Place and continues an eighteenth century terrace half of which was bombed. The block has been designed to maintain the scale and texture of this terrace. The same courtyard also gives access to



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Flats & Garage:

Marble Arch

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the garage and to a service entrance. The garage is arranged on a series of half-levels connected by short ramps with a double row of parking places at each level. A lift discharges into the open air near the main entrance. The flats are either two- or three-bedroomed, with all living-rooms facing south or east. The tall block has recessed balconies the full width of the room. Bathrooms are internal, mechanically ventilated.

Construction is concrete, employing precast wall-units each 5ft. wide placed in position against light removable steel frames. Floors are cast in situ. Facing materials are brick, Portland stone and quartzite.

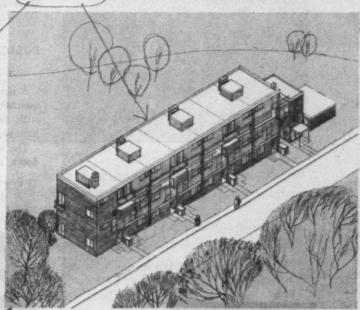
Associate in charge, A. R. Osborne. Structural engineers, Jenkins and Potter. Mechanical and electrical engineers, Donald Rudd and Partners.

#### HOUSING: ABBOTS LANGLEY, HERTS.

Ernő Goldfinger

For Watford Rural District Council, on a site, sloping steeply from north-east to south-west, previously occupied by a Regency mansion. Work began last March and will be completed in the spring of this year.

There are 28 dwellings, comprising a block of four terrace houses, a four-storey block with 14 maisonettes (illustrated herewith) and a



block with five ground-floor flats and maisonettes over them. There are also two blocks of garages (with room for 15 cars) as well as room for cycles and motor-cycles.

The terrace houses have cross-wall construction with low pitched roof. The maisonettes are of precast concrete units with main floors of concrete and the floors inside each maisonette of timber.

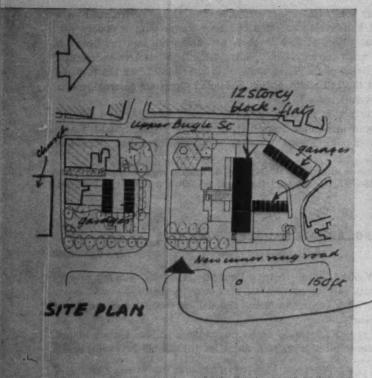
Quantity surveyors, Davis, Belfield and Everest.

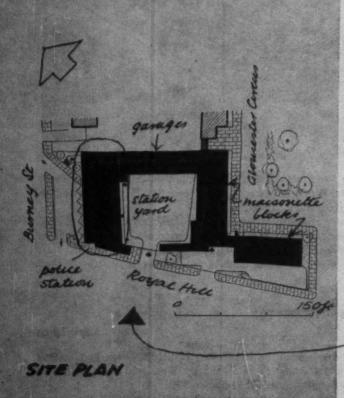
#### FLATS: SOUTHAMPTON

Eric Lyons

For the city council, on Lansdowne Hill, 30ft, above surrounding land (the site was that of an old castle). Work will begin early this year and will be finished in the summer, 1961.

Bad foundations made it more economical to plan all the accommodation in one block, which also avoided building too near an old







church adjoining the site. The block (of 12 storeys—the highest in central Southampton) contains 32 two-bedroom flats, 32 three-bedroom flats and 8 one-bedroom flats. As many as possible face south with a view over Southampton Water.

The building has reinforced concrete cross-wall construction with precast units used as permanent shuttering and precast cladding at the ends of the block.

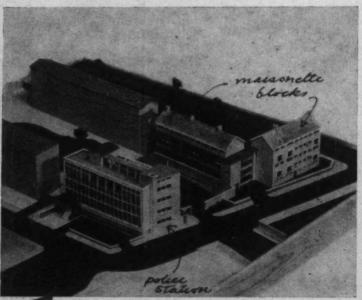
Engineer, Z. Pick. Services consultants, H. C. Barratt and Partners. Quantity surveyors, Monk and Dunstone.

#### POLICE HOUSING AND STATION: GREENWICH

#### J. Innes Elliott (Chief Architect, New Scotland Yard)

A new divisional police-station and a four-storey block of married quarters consisting of 16 maisonettes. They are separated by a yard with garages for station cars. The site is east of Greenwich townhall. Work will begin in March.

The station block has a sub-divisional station on ground and first floors, divisional headquarters on the second floor and kitchen and



canteens on the third. On a lower ground floor are the parade room and stores; heating and ventilation plant are in the basement.

Construction is a reinforced concrete frame faced with precast stone and brick panels and walls.

Senior architect in charge, D. T. Edwards. Executive architect. C. Liardet. Electrical and mechanical engineer, A. R. L. Collis (Chief Engineer, New Scotland Yard).



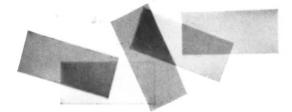
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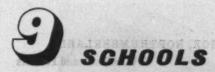
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Felix J. Samuely, Questity surveyors, Davis, Bellield and Ilyang

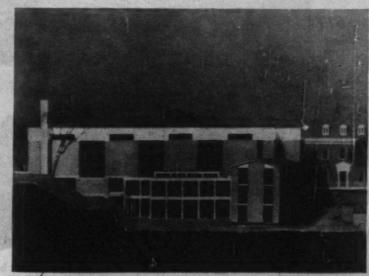
#### DINING HALL: MARLBOROUGH COLLEGE

David Roberts

To accommodate 850 boys, prefects and masters so that the whole school can have meals together. The buildings will be constructed over the existing dining-hall, so that continuous use will not be interrupted. The demolition will take place in stages, fitting into school holidays. Work will start this spring and will be completed in the autumn, 1961.

The work also includes a new kitchen and living accommodation for the domestic staff (already under construction and due for completion in March). It enables the original eighteenth-century house to be freed from the later buildings that have been constructed against it. The existing basement, containing the boiler-house, is to

Construction is load-bearing brick with reinforced concrete stiffen-







ing and timber folded-slab roof covered with copper. External finishes are local hand-made red brick and Portland stone aggregate concrete. Foundations are mass concrete. Windows are aluminium. The interior of the hall has a stone floor.

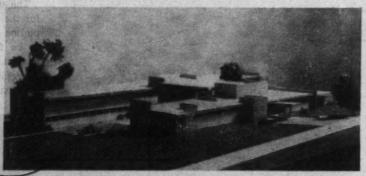
Associate architects, Christophe Grillet; Geoffrey Clarke. Engineer, Felix J. Samuely. Quantity surveyors, Davis, Belfield and Everest.

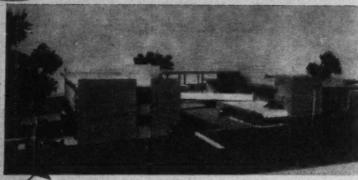
#### SPECIAL SCHOOL: PRUDHOE, NORTHUMBERLAND

S. W. Milburn and Partners

For the Newcastle Regional Hospital Board: a residential school forming part of the "Children's Village" at the Prudhoe and Monkton mental deficiency hospital, for 230 patients of different ages and mental capacities. It replaces an existing school which is too small and out-of-date. Construction is scheduled to begin about the middle of this year.

The building will also be used for evening courses for adult patients, so is sited at the south-east corner of the "Village" near the main hospital. It comprises a single-storey administrative wing,



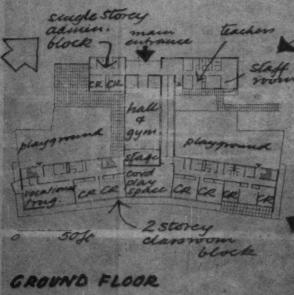


Tinked by an assembly-hall and gymnasium to a two-storey classroom block. A sloping site has been used to provide easy ramped approaches as many of the pupils are crippled. Segregation of groups of pupils and separate cloakroom accommodation for each group was required because of the diversity in ages. The average number of pupils in a class is 15, or eight in the case of some difficult groups. There are covered play areas, but only rudimentary gymnasium facilities as physical training is done elsewhere in the hospital. There are also existing playing-fields nearby, but small grassed play areas have also been laid out near the school.

The building is of steel frame construction with reinforced concrete floors and patent timber roofs. Facing bricks are light buff. Windows are metal in wood frames. Heating is by low pressure hot water, served from an existing system. The assembly-hall has mechanical ventilation.

Associated architect, P. H. Knighton (Architect to the Newcastle Regional Hospital Board). Assistant architect in charge, M. Harding. Model maker, Denis Wilkinson.





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# workshop block SITE PLAN Secondary school: Crouch End CR

#### SECONDARY SCHOOL: CROUCH END, LONDON

Edward D. Mills and Partners

A four-form entry secondary modern school for 600 boys and girls, to be called Bishopswood School and situated in Montenotte Road, N.8. Work began last May and will be finished in the autumn of this year.

On a difficult site: small, intersected by a stream and with shrinkable made-up ground. The stream is enclosed in a culvert and the assembly-hall and gymnasium block built on the steep terraced bank to the south of it. This block also contains the dining-hall and kitchen, with a school-keeper's flat over the latter. It is linked by an enclosed bridge to the first floor of the four-storey classroom block. Changing-rooms, cycle-stores, etc., are fitted in at a lower level, utilizing the fall of the ground. The single-storey workshop block is separate, to reduce sound transmission.

Because of the risk of subsoil movement the hall block has a special foundation system with concrete piles tied together by continuous pile beams and supporting a reinforced concrete frame on which the main floor rests. On this platform are erected welded steel portal frames with angle purlins. Below the main floor-level walling is black brick; above it is buff cavity brickwork with timber curtain-walling having solid panels of enamelled asbestos and glazed opening lights. The gymnasium is faced with concrete blocks with recessed black vertical joints. The classroom block has a reinforced concrete frame with timber curtain walling and panels of enamelled



asbestos or vertical cedar boarding. Solid walling is in buff brick. The workshop block has a steel frame faced with brick or concrete blocks.

Assistant in charge, Peter Milne. The school designed in collaboration with Whitfield Lewis, Middlesex County Architect, C. G. Stillman, former County Architect and D. R. Duncan, Area Architect. Structural and electrical engineers, Middlesex County Council. Heating and ventilating engineers, G. H. Buckle and Partners. Quantity surveyors, Harry Trinick and Partners.

#### GRAMMAR SCHOOL: SHIPLEY, YORKS

Chamberlin, Powell and Bon

For 720 boys and girls; to supersede the present school at Saltaire built by Sir Titus Salt a hundred years ago. Work will begin in March.

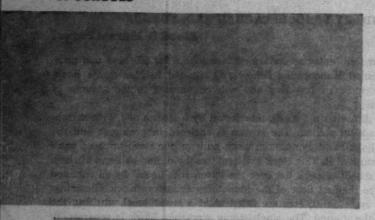
The site is a strip of land running east-west at the foot of a wooded escarpment that slopes steeply to the south, and the school has been compactly planned so as to leave the site as free as possible. It is on two floors surrounding an internal courtyard containing a small circular half. The various elements are reached through the courtyard, which is entered beneath a covered opening in one side. The main assembly-hall, on the far side from the entrance, can be enlarged by opening the surrounding circulation space into it, some of which is used for dining. The floor of the hall is sunk so that this

GROUND FLOOR

ammar School

Shipley, yorks

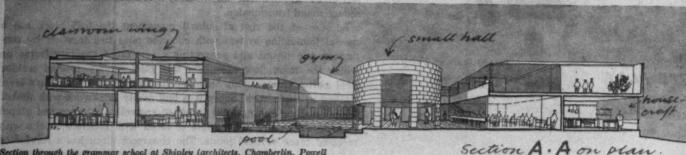
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space forms raised galleries. In the teaching areas most of the classrooms are together on the west, and the specialist rooms are in three groups according to the type of lighting they need: science; housecraft and needlework, and art and woodwork. Open terraces, at first-floor level, protected by flank walls, are planned in connection with art-rooms, library and staff-rooms and in the science wing for use for meteorological observation, etc.

Lower floors are of reinforced concrete and load-bearing block construction with finishes of coarsely picked hammered concrete and glazed terra cotta. The upper floor is of light steel frame construction with wood frame and glazed walls.

Architect in charge, Keith Manners. Designed in collaboration with A. W. Glover (West Riding County Architect). Engineers, Taylor, Whalley and Spyra. Quantity surveyors, Davis, Belfield and Everest.



Section through the grammar school at Shipley (architects, Chamberlin, Powell and Bon), showing the small circular hall standing in the central courtyard.

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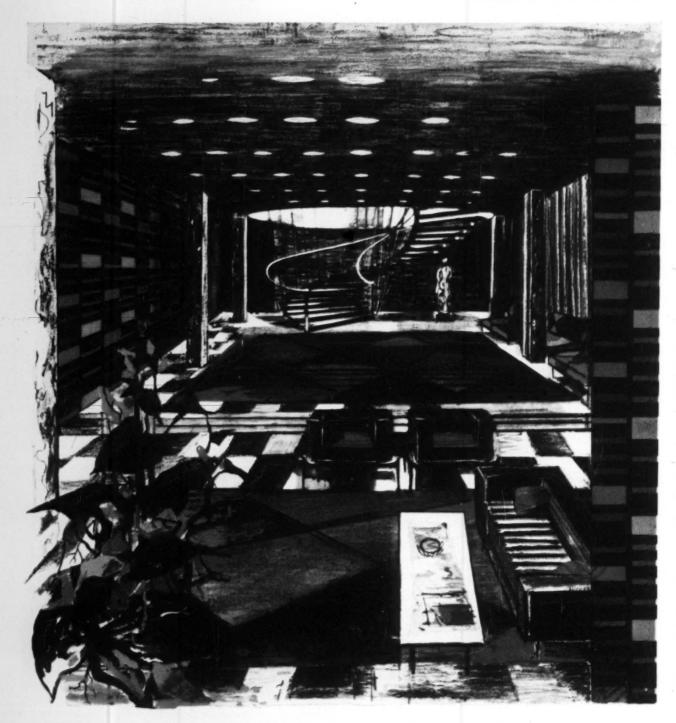
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#### EXHIBITIONS

PAINTINGS

The white on white picture painted by Kasimir Malevich in 1918, which is on extended loan to the Museum of Modern Art, is the Gioconda of twentieth-century painting. It has acquired the character of a magical symbol, and to a great many people who have not even seen a reproduction of it, it is either more or less than a picture—an object of reverence or a target for ridicule. When it appeared at the Tate in 1952, in an exhibition organized by the Congress for Cultural Freedom, it would not have surprised me if a young follower of Duchamp or an old friend of Munnings had added a moustache to its enigmatic surface.

It is Holy Russia's last icon, Modern Art's first masterpiece of pure abstraction, the mystical counterpart of the hammer and sickle, and as a Russian critic wrote just before the art of the Revolution was suppressed in favour of Soviet realism, 'a rocket sent by the human spirit into nonexistence,' And the suppression was so thorough, and the artists who escaped from Russia so egocentric, that in the West the word Malevich has had only as much of a human personality attached to it as could be read into a white square painted diagonally across a white ground, and has seemed less the name of a man than a Russian euphemism for 'Anon.' At least, that's how things stood here until an exhibition of his work came a short while ago to Whitechapel Art Gallery.

We have not been told who released the pictures for exhibition or why they were kept out of sight for so long, but it is now obvious that a few people have known for something like thirty years that Malevich left a large group of paintings in Germany when he made a trip there in the late twenties to try to arrange a one-man show. Apparently it has been kept more or less intact, since the pictures shown in London are said to constitute a considerable portion of it. The bulk of his work is still, of course, behind locked doors in Russian museums: nevertheless, the Whitechapel exhibits have the look of being handpicked to represent all the phases of his remarkable career.

They came to Whitechapel as a package from the Stedlijk Museum, Amsterdam, and although Bryan Robertson declares that the London catalogue is 'essentially' a

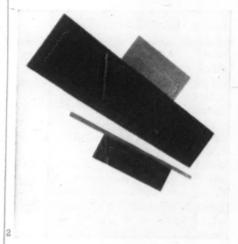
translation of the document prepared by the Stedlijk people, he has, in fact, added a fascinating introductory essay by Camilla Gray as well as her translations of excerpts from Malevich's own writings. Mr. Robertson also admits to making some amendments to the Stedlijk document, but he does not indicate where or why, and rather too enigmatically remarks that they are 'largely connected with the dating of the pictures,' based on information furnished by Miss Gray. The paintings are mostly unsigned and only two of them are dated. but on the face of it the dates in the catalogue certainly make sense and after an impressionist phase, represented by one picture, point to a swift series of changes leading into the geometrical style to which he gave the name of Suprematism. There are no weak links in the chain, and each step taken towards the absolute autonomy of painting is characterized by the joy of discovery and the sobriety of total conviction

The paintings dated from 1907 to 1910 depict a toiling and dancing peasantry in a style which strikes a balance between the arcadianism of Matisse's Fauvist figure compositions and the emotionalism of the Brücke expressionists, and in the following year the same subject matter is used in a brilliant version of physical cubism which he called 'non-sense realism.' In 'The Woodcutter' and 'Bringing in the Harvest' all the forms resemble smooth curved metal plates heated up to the red to yellow colour range: they meet and lock on the picture surface without spaces between. These pictures are as beautiful and absurd as the best work of Leger's style mecanique phase, but they dispense with Leger's decorative composition props. Before the



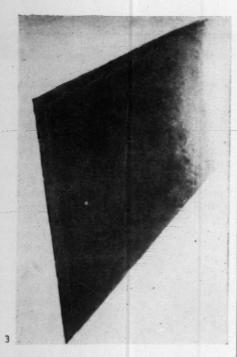
year was out he painted a cubist rose like a cast-iron version of Picasso's factory at Horta painted two years earlier, and from 1912 to 1914 he concentrated on a cubofuturist synthesis which would appear to have been brought to a conclusion in the collage-painting called 'Woman beside an Advertisement Pillar,' 1, where two flat screens of colour float across the intricate clutter of signs like messages from nowhere. Up to this point he was just behind the innovators, examining and re-thinking their concepts with passionate intelligence. But from then on he was out on his own.

The exhibition includes a drawing dated 1914, which is a handwritten study for a picture without handwriting. It bears some relation to the Suprematist painting called 'Construction 18' (dated 1915 in the cata-



logue), 2, but some small 'direction-finding' attachments turn the forms into abstract aeroplanes and make it evident that such paintings as 'Construction 18' are intended in some measure as a celebration of man's physical conquest of space. In this sense the first phase of Suprematism retains a slender connection with Futurism. At a slightly later date, the white ground is occupied by crosses, and then in 1917 a superb painting of a large yellow quadrilateral fading off at the far edge into white, 3, immediately precedes the white on white pictures.

There were three white on whites in the exhibition—pictures in which the ghost of a form, faintly greyish in tone, emerges from or recedes into a whiter white. They tell nothing in reproduction, but in front of the paintings themselves one becomes aware of spaces more intimate and yet more remote than our 'coloured background of sky.' They bring his life as a creative artist to a close, and he could only have had these things in mind when he



wrote in 1922, 'Man distinguishes himself as a thinking being and removed himself from the perfection of God's creation. Having left the non-thinking state, he strives by means of his perfected objects to be again embodied in the perfection of absolute non-thinking life.'

Miss Gray's essay provides the first sketch of Malevich's career to be published in the English language. She tells us that during the early years of the Revolution when Suprematism was the dominant style in Moscow, and non-figurative painters were in charge of the museums and art schools Malevich devoted all his time to devizing a Suprematist system of artteaching and later became absorbed by projects for an 'ideal' architecture. Many documents connected with these interests were on view, and the diagrams and colour charts in which he demonstrates the development of painting since Cézanne and the interrelationships of the various schools suggest that he has no peer as a grammarian of modern art. The diagram in which he devizes eight signs to represent the characteristic basic structure of the work of eight cubist painters is a pedagogical masterpiece. The drawings for an 'ideal' architecture are disappointing, and are much more interesting as psychological documents than as architectural projects. The acute angle at which his groups of building blocks are depicted is in line with the Suprematist diagonal, but he has quite failed to make it the basis of his architectural constructions and in this context it is only a very naïve reflection of his belief that 'at the present moment man's path lies through space.' In one instance the building takes the general form of an aeroplane.

In 1932, when every kind of art other than Soviet Realism had been successfully suppressed in Russia, Malevich started to paint a series of portraits which Miss Gray describes as 'stiff and primitive.' The catalogue contains a reproduction of the self-portrait painted in 1934, the year before his death, but it is not so much stiff and primitive as hieratical. It is the portrait of a high priest expounding the Word, and the word is Suprematism. A coloured reproduction of it should hang in the entrance hall of every museum of twentieth-century art.

The exhibition called 'Art in Revolt,' held at Marlborough Fine Arts, was a splendid anthology of German painting between 1905 and 1925. It included work of the highest quality by all the leading painters in the *Brücke* and *Blaue Reiter* groups, the independent Expressionists Kokoschka and Beckmann, and the Dadaists Ernst and Schwitters. If there was one painter who was less well served than the others it was Beckmann, for the pictures which represented him were painted before he discovered the blazing colour which transformed his sadistic imagery into a presentable eroticism.

One was not particularly conscious of the dividing line drawn by Professor Grohmann between 'expressionists' and 'spiritualists,' although it was evident enough that the *Blaue Reiter* artists, Klee, Macke and Mare, were less involved in making inflamatory propaganda for the senses than the Brücke painters Kirchner, Nolde and Mueller.

Behind the work of the Brücke painters lurks Corinth's incredibly brutal 'Self Portrait as a Bacchanalian,' which is a mirror-image—painted with lush virtuosity—of a man grimacing in sensual ecstasy, and the horror of it is observed with complacent sharpness. In the Brücke painters there is the same sensual extravagance and the same hope of the imperfectibility of

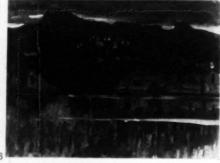


mankind, but the gesticulation of the brush plays a larger part than the grimace in the mirror in the expressiveness of the picture, and it is as if the brush itself were never free from the itch of desire. When the subject illustrates, so to speak, the orgiastic nature of the brushwork, the effect is almost too overwhelming, as in Nolde's



'St. Symeon and the Women.' It stays just within bounds in the brilliant portraits of women by Kirchner, 4, and Otto Dix, 5.

Kandinsky's use of automatism in his abstract expressionist paintings seems to



me to lead by another route to the same orgiastic results, and the notable examples in the Marlborough show have more in common with the flame-like paint marks in some of the work of Kirchner than with the Blaue Reiter painters who were his associates. Even the landscapes which were painted just before his free abstractions are closer to Nolde's passionate painting of a darkly rolling sea than to the [continued on page 67]



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The Architectural Review January 1960



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#### continued from page 66]

fauve works which influenced him. A brilliant example at the Marlborough which stands midway between observed landscape and abstract expressionism is somewhat spoilt for me by the comically decorative use of phallic forms, and I prefer the brooding landscape in dark blues and reds, 6, which was included in the latest of the Lefevre Gallery's elegant miscellanies of nineteenth- and twentieth-century masters.

The exhibition of Swiss painting and sculpture at the Tate was accompanied by a beautifully planned and printed catalogue; with a small reproduction beside each catalogue entry. Works by Klee and Giacometti were included in the show, but they did not 'show-up' the less exportable side of Swiss art. It was difficult to take Hodler's large early painting of a miller on his donkey, with laughing peasant girls waving him on, but Hodler outgrew its anecdotal gusto and the late painting of a



dead woman was like a foretaste of Gruber. Many Swiss painters took their cue from Hodler, notably Otto Meyer-Amden, whose small shadowy pastels of weavers and their families are full of deep, quiet feeling, and René Auberjonois, who is obviously interested in Cézanne and the Cubists, but gives his work a countrified air even when he is not painting peasants, and in his self-



portrait, 7, painted in 1936, he provides himself with a whimsically humble and 'outmoded' appearance.

Our own Stanley Spencer puts on a countrified act with less discretion and a more exaggerated eccentricity, but the painting from the 'Christ Preaching at Cookham Regatta' series, 8, which was one of his contributions to the latest 'Critics' Choice' at Tooth's Gallery, was the outstanding exhibit. If all the energy which he spends on extravagant gestures and queer postures were put into the brush stroke he would be our most active action painter. The other artists chosen by Terence Mullaby did not measure up to his vitality although some of them made much more strenuous play with their brushwork.

Robert Melville

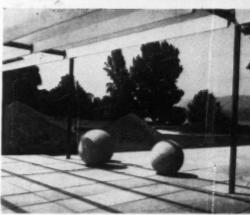
#### SWISS LANDSCAPE EXHIBITION

The first landscape exhibition was held in Dresden in 1928 and since then there have been exhibitions in many of the larger German towns. The idea is spreading to other countries. Switzerland had its first exhibition in Zurich last year, and this year Holland is to have one at Rotterdam.

At its best-and parts of the Zürich exhibition were very good indeed-the

- 1, view from Belvoir terrace across the parterres and Mirabelle fountain to the cable railway which formed a link with the other half of the exhibition on the north side of the lake.
  2, the Philosopher's garden by Ernst Cra
- was one of the experimental areas in the north















landscape exhibition has much to commend it. It makes it possible to display the infinite variety of plant material and the ways in which it can be used in open spaces and as a setting for buildings. Exhibitions can support experiments in landscape design which would be impossible in permanent work. They can help to fan a demand for more open space and for better landscaping. And they may make it possible to add a new permanent park to the town.

The Zürich exhibition was divided into two parts on either side of the Lake, linked by a cable railway in typical Swiss style. The two parts contrasted in every way. The northern one had views over the lake and the wooded hills to the south and the designers quite rightly took advantage of this with an outward looking scheme. They had to cope with more of the business side of the exhibition with all the trade exhibits and with massive advertising beds of flowers.

On this side there were a number of bold experiments in design. Perhaps the most successful visually was the 'philosopher's garden' consisting of a group of grassed pyramids. However they must have been difficult to mow and would probably grow very tiresome after a few visits. The

[continued on page 69

Swiss Landscape Exhibition

3, the children's playground in the centre of the Zürich exhibition, by Walter and Klaus Leder. 4, the garden of love, by Ernst Baumann and Klaus Leder, in the northern section.

5, the main entrance from Zürich, by Walter and Klaus Leder, had octagonal panels of planting and paving.

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### Swiss Landscape Exhibition

6, one of the standard credit panels.

7, detail of the pergola. 8, the water garden with the Mirabelle fountain, which changed shape continuously for an hour and a half.

and a hay.

9, one of the tea rooms.

10, the water garden and fountain, looking towards Belvoir terrace. On the right is the pergola which ran from the larch wood to the country.

house. — 11, the country house and water garden, by Walter Leder.

### continued from page 68]

'garden of love' was an interesting conceit but lacked the necessary virtuosity. In general the northside could be regarded as a series of bold but on the whole unsuccessful experiments lacking any under-

The south side was an inward looking 9 scheme. Apart from a few views out over



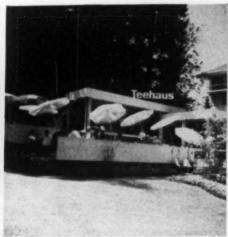
the lake it turned its back on its surroundings. With the exception of the lake restaurant all its focal points were within the scheme and the layout was designed to focus and regulate the tension between them.

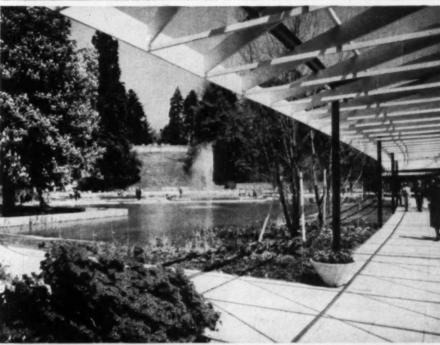
The main entrance from Zürich was 10 formed out over the lake. A hexagonal motif was used and although this can be tiring when carried to excess it seemed to fit the site very well and gave a feeling of unity combined with considerable informality in the various shapes of plant beds and paving.

The entrance was separated from the













12 standard park seats

main area by two fast motor roads and the problem of access was not an easy one. Ordinary pedestrian bridges would have cut the flow of interest just as the visitor was getting the feel of the exhibition. The solution took the form of a wide elevated wooden piazza spanning both roads and completely hiding them except for a dramatic down-looking chimney with the ears flashing past below. Piazza and chimney pointed the moral of pedestrian segregation very effectively and this idea of a wide-spanning piazza is perhaps one which could be added to our planning repertoire and used as part of upper level circulations in permanent schemes.

The piazza led to a steep wooded park rising to a Victorian villa converted for the occasion into a large open-air restaurant with an enormous orange and red canopy almost as big as the villa itself. This faced the upper terrace which marked the end of the original Belvoir Park which had been remodelled to form part of the exhibition. Originally there was a dense wall of tall trees at this point masking views of the lake and making the park very dank and gloomy. The designers took the bold step of cutting down a number of these trees to open up a view to the new fountain pool and flower terraces. This clean downward sweep was a most successful piece of landscape surgery and an object lesson in what can be done to remodel an existing landscape by inspired ruthlessness.

The focal point of the south end of the exhibition was the fountain pool with a 'Mirabelle' fountain which changed its shape continuously for a period of an hour and a half. Along one side of the lake was a wooden pergola 100 metres long which in its way was almost as successful as the fountain. Walking along under it with a red brick wall along one side and the pool on the other one had a feeling of fine scale and airy space. At the far end was a weekend house delightful in its detailing however impractical it might be in real life. This part of the exhibition contained some

really excellent planting and detailing of paving and was perhaps the highlight of the whole show.

This example of Swiss enterprise surely has a lesson for us. Why shouldn't one of the more progressive of our English towns or new towns follow this example to their greater glory and the furtherance of good landscaping?

Gordon Logie



Standard symbol of the Zürich landscape exhi-

### COUNTER-ATTACK

#### POSITIVE STREET FURNITURE

Street furniture which is quiet and unobtrusive is still rare enough; street furniture which makes a positive contribution to a town is almost unheard of. So two examples from East Lothian are especially welcome. The bus shelter at Haddington, 1, is near the north end of the Hardgate Redevelopment scheme. It is built mainly of stone saved from demolished cottages and makes a particularly agreeable link between the new flats and the wall of the old house behind. The main point seems to be that it is planned as a unit with its surrounding

walls and in careful relation to the buildings next to it.

The other photograph, 2, shows a public lavatory at Dunbar, in which a very fresh and attractive shape has been added to the (rather broken up) sea-front. Here the material is (for a lavatory) as unconventional as the shape; and it is heartening that the concrete hasn't been forced to imitate something else, but has been used to give strength and boldness to the design.

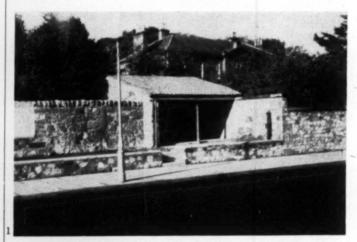
Andor Gomme

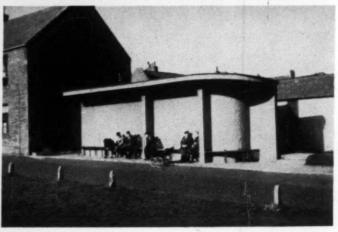
#### THE NOTTINGHAM CASTLE

That London's villages are a hackneyed subject doesn't make them any less important. More than anything else they keep London sane and vital; the oases of quietness and small-scaleness which, by contrast, reinforce the metropolitan effect of the main streets. A city that is all big scale like New York and one that is all medium-small scale like Zurich can both be a kind of death, but the consumation of the two, a continuous dialectic of Here and There accentuating one another—c'est magnifique.

One of the most surprising and least arty is made up of the few streets between Grosvenor Place and Belgrave Square. Between Gog and Magog, so up in the world that only organisations can afford to live there, are unpretentious two and three-storey brick terraces—Little Chester Street, Wilton Mews—with their own village post-office and three village pubs, the best of them being the Nottingham Castle. There is not a hint of architecture, which is as it should be, although the front of the Nottingham is a classic example of what can be done with three storeys of stockbrick and a pair of signboards. It is just occupied with being a place, expressing a sense of communal identity: something you might plan

[continued on page 72





stone-built bus shelter
 at Haddington.
 public lavatory as
 Dunbar.



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### continued from page 70]

and plan for and never get, as long as you were planning with the intellect only.

This tiny patch of London, Belgravia village, has changed hands. The new owners have started rebuilding, and intend to take down one whole side of Little Chester Street, including the Nottingham Castle. They are replacing three-storey brick terraces, Georgian because they just happened to be built about 1820, by three-storey brick terraces, neo-Georgian because someone thinks that neo-Georgian is the thing to build in this areapossibly to tie in with the strange custom of these Belgravians of wearing eighteenth century dress and coming to work only in horse-drawn carriages.

In case the irony does not register, let me be explicit. The new buildings, if continued, will produce an area that will be dead of all qualities of either heart or mind. It will be an architecture of conditioned reflexes-somebody said 'keep in keeping,' so somewhere else a parlour-dog paw jumped to obey. It will kill the place as surely as if a weeny H bomb had gone off.

There is no need to take this jeremiad on trust, The same effect can be seen everywhere that property developers have built this parlour-dog neo-Georgian: Bayswater, Chelsea, Kensington, worst of all in those few parts of Mayfair and St. James's where the real stuff is still alive and kicking (quote from an important property man: 'Contemporary? Of course it's contemporary.

It's going up right now in Grosvenor Square, isn't it ?') I do not say that if the replacements were modern architecture (or preferably, no

[continued on page 74









3, 4, the Georgian terraces of Little Chester Street

and Wilton Mews..
5, one of the cleared sites.
6, the new terraces which are now going up.



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### introduction:

Few subjects can claim a more diverse group of interests than colour.

Psychologists, photographers, physicists, physiologists, philosophers, printers, paint manufacturers, lighting engineers and artists are but a few with such interests, each with their own problems and inevitably each with their own definitions—a babel of many tongues. The chemist employs it as a generic term for dyes, pigments and like materials. The physicist regards the term as a description of certain phenomena in optics. Physiologists and psychologists use the term to denote a sensation in the consciousness of a human observer. Colour is a household word as well and is commonly used indiscriminately in all three senses.

The three definitions are firmly rooted in the language and it is futile to expect one definition only to be adopted. The definition used must be the one most nearly applicable to the case under consideration.

There is no difficulty in distinguishing the use of the word "colour" to mean a pigment, dyestuff or other coloured material in a finely divided form, but the distinction between the objective physical definition and the subjective psychological one is more subtle. The objective measurement of colour is a physical reality and once determined remains fixed. The sensation that results when one looks upon a coloured object depends to a considerable extent upon the nature of the surrounding field and the nature of the field to which the observer has previously been exposed.

It is intended to run a series of these announcements which will endeavour to outline the importance of the subjective use of colour to the architect and building designer, and to show how such knowledge can be used.

Goodlass Wall & Co. Ltd., Corn Exchange, Liverpool 2, or 179/185 Gt. Portland Street, London, W.1

COLOUR

7, view from inside the Nottingham Castle.

### continued from page 72]

'architecture' at all, like the originals) they would automatically have these human qualities, but at least the failure would be an honest one.

As a property speculation the return from this bit of development will not keep a magnate or board of directors for very long: if I were a prospective house buyer in Belgravia, I would say that they were producing approximately the same amount of accommodation combined with much less attractive appearance. At the time of writing rebuilding was already well under way, but, for the sake of a real place—something which cannot be bought along with the Bentley Continental or the yacht—would the company be prepared to let the remainder be until the natural life of the buildings demand their removal piecemeal and rebuild in whatever style then happens to be current?

I do not think for a moment that such a miracle will happen. If the plans have not been passed, I can only whip up the natural antipathy between planners and developers by suggesting that the whole area be scheduled for group value, recognising the irony of using museum-piece techniques to try and keep the identity of something completely unlike a museum-piece. If the LCC Town Planning Committee do not know the area-it is easily missed-and care to go and have a look, they will see the charm and the threat-or the aliveness and the deadnessimmediately. Meanwhile, and for a wider audience, here are some photographs taken in and around the Nottingham Castle. One might read all the planning textbooks in the world and never find the recipe for this: yet without it is nothing.

Ian Nairn





### CONTRACTORS etc

Engineering Building, Edinburgh University. Architect: R. Gardner-Medwin. General contractors: Crudens Ltd. Sub-contractors: Steekwork: Redpath Brown Ltd. Heating and ventilating: Richard Crittall & Co. Precast concrete floors and roof: James K. Millar & Co. Thermoplastic floor tiles: Limmer & Trinidad Lake Asphalt Co. Mosaic and terrazzo: Toffolo Jackson & Co. Core rail and balustrading: Marley Tile Co. Windows: Quicktho (Engineering) Ltd. Electric lifts: Glasgow Engineers Ltd. Acoustic materials: Hermseal Acoustics Ltd. Mastic, asphalt tanking: Limmer & Trinidad Lake Asphalt Co. Scaffolding: J. & W. Henderson Ltd. Linoleum flooring: Neuchatel Asphalt (Contracting) Ltd. Window blinds: Accord Blinds Ltd.

Western Bank Development, Sheffield. Architects: Gollins, Melvin, Ward and Partners. General contractors: Boiler house: M. J. Gleeson Ltd. Chemistry building, west wing: M. J. Gleeson Ltd. Chemistry building, east wing: Simms, Sons & Cooke Ltd. Physics and mathematics building: Tersons Ltd.

County Council Staff Club and Offices, Wakefield. Architect: A. W. Glover, County Architect. General contractor: T. Coggon & Co. Sub-contractors: Structural steel: Octavius Atkinson & Sons. Precast floors: Truscon Ltd. Heating and ventilation: Sulzer Bros. (London) Ltd. Electrical: F. H. Wheeler & Sons. Metal windows: Henry Hope & Sons. Stone: Johnson Wellfield Quarries Ltd. Slate: Lake-

[continued on page 76

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continued from page [74]

land Green Slate & Stone Co. Lift: Keighley Lifts Ltd.

Civic Centre, Southend-on-Sea. Architect: P. F. Burridge, Borough Architect. General contractors: Gray Conoley & Co. Sub-contractors: Curtain walling: Williams & Williams Ltd. Terrazzo: Arcanum Terrazzo & Stone Co. Lifts: Evans Lift Ltd. Heating: Weatherfoil Heating Systems Ltd. Suspended ceilings: Hall & Co. Sanitary fittings: B. Finch & Co.

College of Further Education, Sheffield. Architect: J. L. Womersley, Sheffield City Architect. General contractors: Higgs & Hill Ltd. Sub-contractors: Steel reinforcement: G.K.N. Reinforcements Ltd. Metal windows, roof lights and patent glazing: Williams and Williams Ltd. Joinery: J. H. Naylor & Son. Facing bricks: The Western Counties Brick Co. Freestanding boiler house chimney: Bowden-Jackson Ltd. Aluminium roof decking: William Briggs Ltd. Asbestos cement roof decking: Universal Asbestos Cement Co. Structural steelwork: Redpath Brown & Co.; Thos. W. Ward Ltd.; Banister Walton & Co.

Offices, Victoria Street, London. Architect: Ronald Fielding. General conractor: Taylor Woodrow Construction Ltd. Sub-contractors: Heating, ventilating, plumbing, drainage, sprinklers: Matthew Hall & Co. Lifts: Otis Elevator Co.

Offices for Fisons Ltd., Ipswich. Architects: Johns, Slater and Haward. General contractors: Walter Lawrence & Son. Sub-contractors: Piling: Frankipile Ltd. Heating: G. N. Haden & Sons. Electrical: E. H. Ruddock Ltd. Lift installations: Evans Lifts Ltd. Precast and prestressed concrete structural units: Saunders (Ipswich) Ltd.

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Television Offices, Manchester. Architect: Ralph Tubbs. General contractors: J. Gerrard & Sons. Structural engineers: Truscon Ltd.

Laboratories and Offices, Harston, Cambridgeshire. Architects: Edward D. Mills & Partners. General contractors: Rattee & Kett Ltd. Heating, ventilation and all services (including laboratory services): Richard J. Audrey Ltd. Electrical: Wilson Heating & Electrical Co. Structural steekcork: Brownlie & Murray Ltd. Windows: John Williams & Sons (Cardiff) Ltd. Asphalte roofing: Cambridge Asphalte Co. Floor finishes: The Marbolith Flooring Co. Asbestos decking and cladding: W. M. Walker & Co. Patent glazing: The Standard Patent Glazing Co.

Power Station, Willington, Derbyshire. Architects: Farmer and Dark. General contractors (main superstructure): M. J. Gleeson (Contractor) Ltd. General contractor (structural steekwork): Peirson & Co. Sub-contractors: Aluminium cladding, patent glazing, roof tiles, etc.: Williams & Williams Ltd. Aluminium deck roofing: William Briggs & Son. Asphalt floors and roofing: Limmer and Trinidad Lake Asphalte Co. Heating, hot water and ventilation systems: Rosser and Russell Ltd. Acoustic ceiling and wall linings: Wiggins-Sankey Ltd.

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Architects: Clifford, Tee and Gale.
General contractors: Humphreys Ltd.
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Postal Sorting Office, Rathbone Place, London. Architects: Ministry of Works. General contractors: Lavender McMillan (Contractors) Ltd.

Railway Signal Box, Manchester.
Architect: W. R. Headley, British
Railways Architect. General contractors: E. B. Jones and Rawlinson
Ltd.—Sub-contractors: Steel: Clare
Engineering Ltd. Precast floors: Marley Concrete Ltd. Roof decking:
Robertson Thain Ltd. Cladding:
S. Warner & Son.

Power Station, Thorpe Marsh, Yorks. Architects: Watson and Coates. Contractors: Foundations: Mitchell Constructions Co. Steel: Redpath Brown Ltd.

Undergraduate Rooms, Oxford. Architects: Powell and Moya. General contractors: Norman Collisson (Contractors) Ltd. Sub-contractors: Stonework: Bath & Portland Stone Firms Ltd. Precast concrete: Woolaway Concrete Products Ltd. Heating and hot water installation: Norman Collisson Ltd. Hardwood flooring: S. H. Ware & Co. Felt roofing: Prater Asphalte Co. Windows: Williams and Williams. Electrical installation: Duncan Watson Limited.

Housing, Haverhill, Suffolk. Architects: Chief Architect's Department, LCC. General contractors: Kerridge (Cambridge) Ltd.

Flats and Garage, Marble Arch, London. Architects: Manning and Clamp. General contractors: Percy Bilton Limited.

Secondary School, Crouch End, London.
Architects: Edward D. Mills and
Partners. General contractors: J. Lawson and Co. Sub-contractors: Copper
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#### Corrigenda

Heals Contracts Ltd. wish to apologize for a printing error that appeared in their advertisement in the August September issue. The caption to the illustration should have read: The Banking Hall of the District Bank Ltd., Newport. Architects: F. B. Bates & Son.

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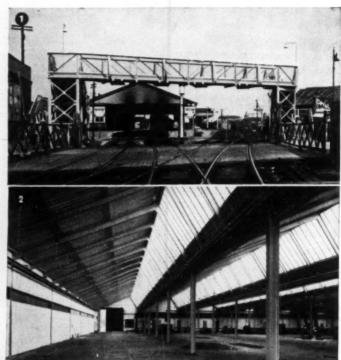
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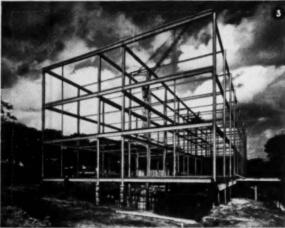
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- Footbridge for Level Crossing in Grimsby.
- Interior view of factory for Messrs. Brook Motors Ltd., Barnsley.
- Sowerby Bridge Secondary School.
- O Block, Elland Power Station.











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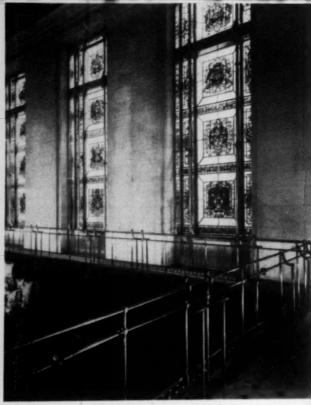
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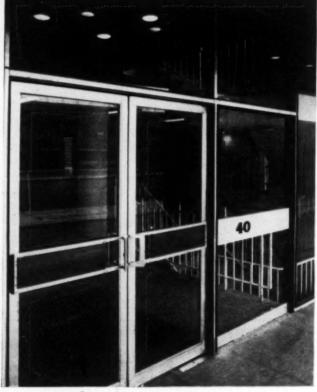
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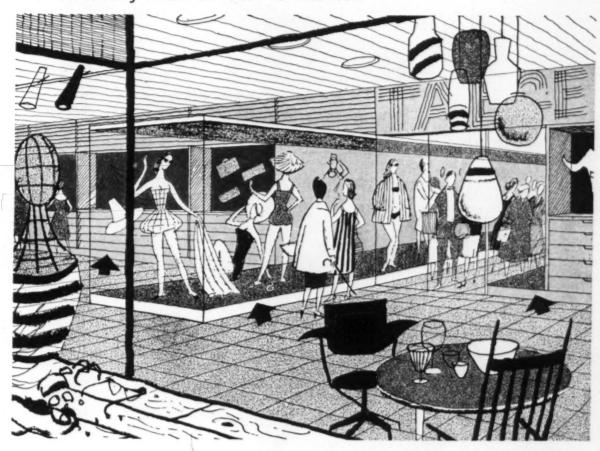
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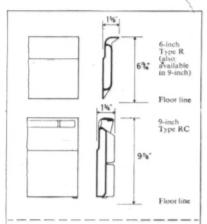
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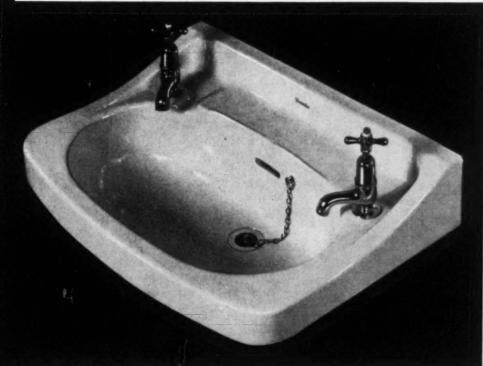


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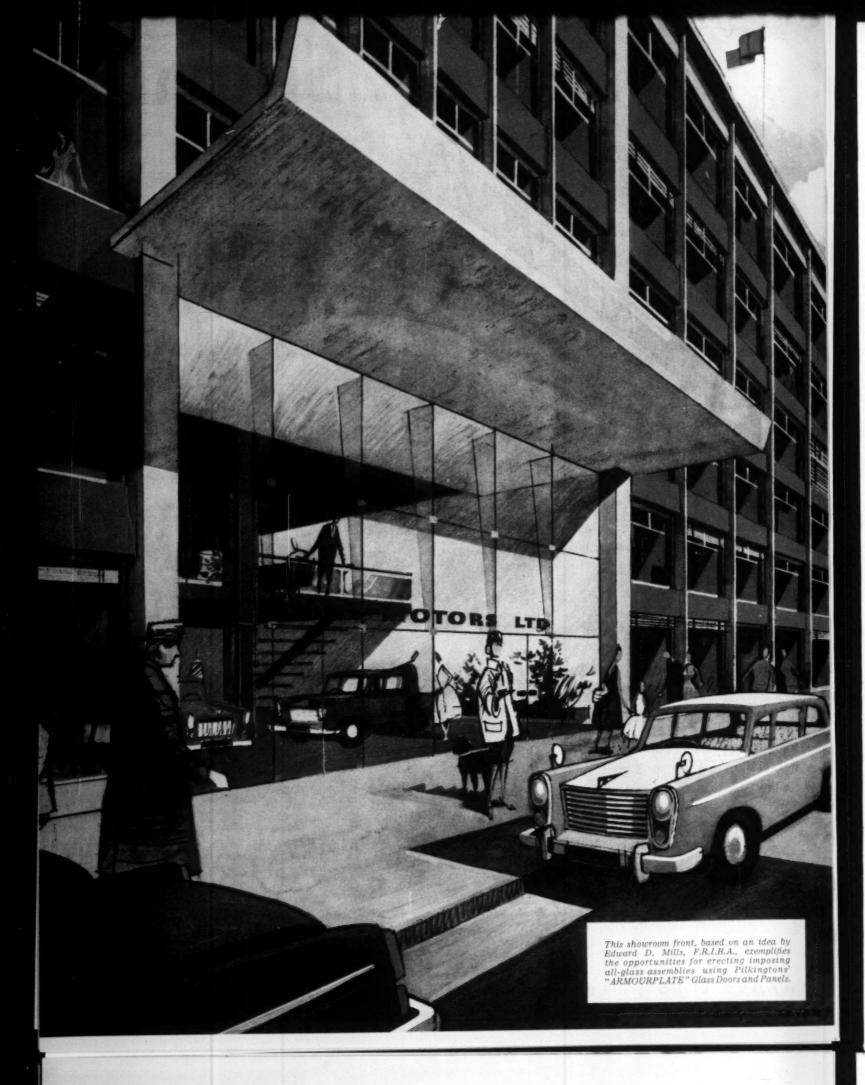
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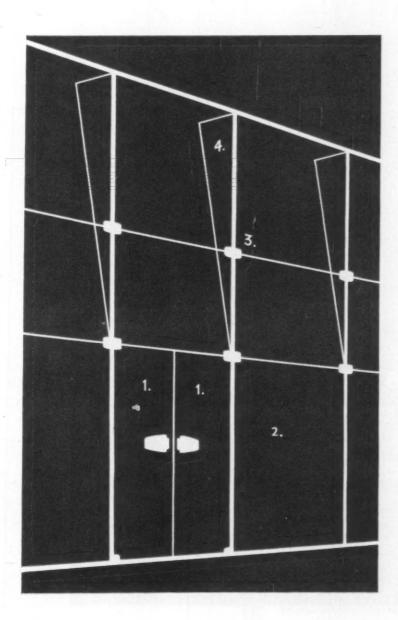


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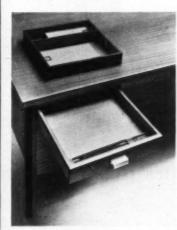
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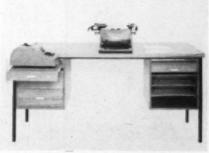


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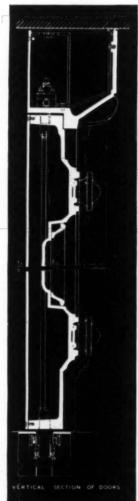
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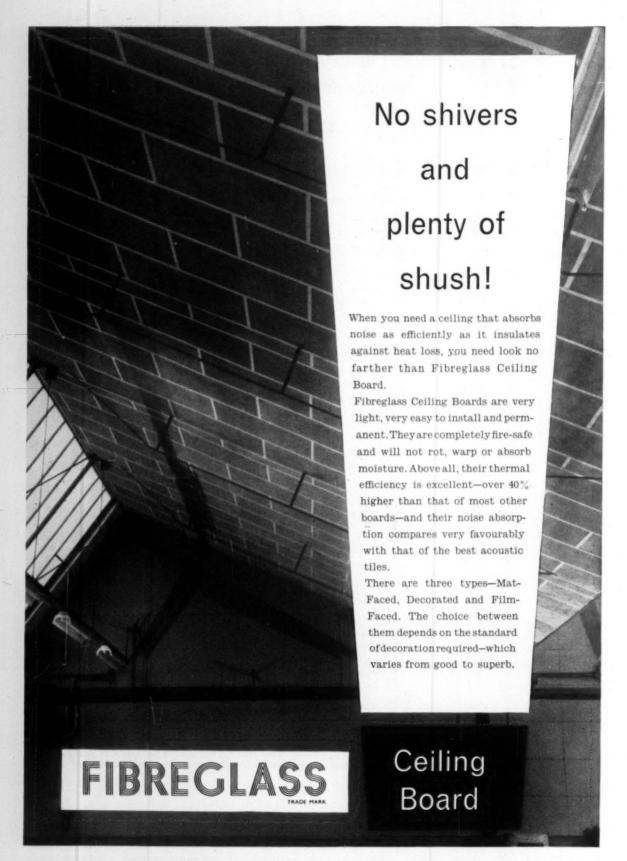
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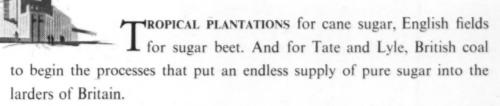
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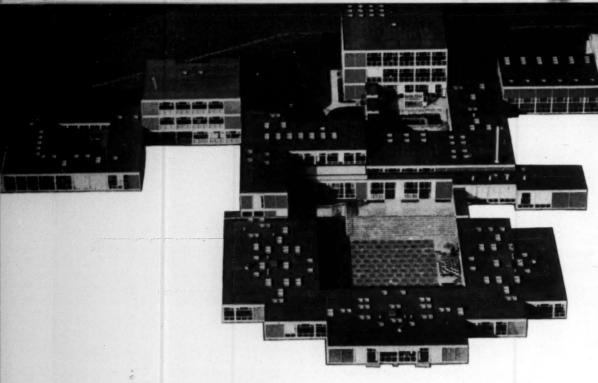
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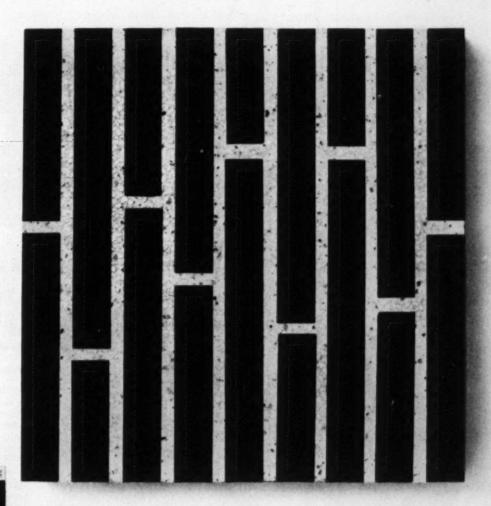
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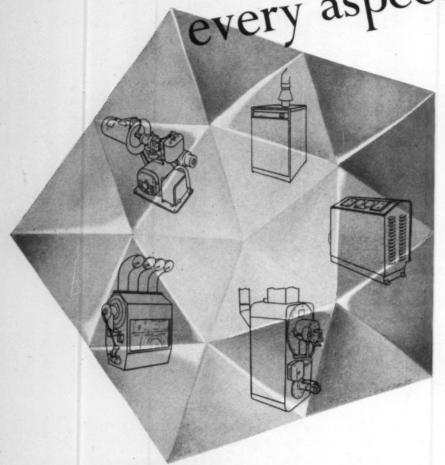
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Architect.

The Late R. A. H. LIVETT, C.B.E. A.R.LB.A.
Leeds City Architect

Consulting Engineers — Healing: OSCAR FABER & PARTNERS London, W.C.1 Heating and sanitary equipment by Ideal-Standard has been installed in the new Leeds City Council flats at Saxton Gardens. Over a thousand Ideal cast-iron column radiators and over nine hundred pieces of 'Standard' vitreous china sanitary ware have gone into these multi-storey buildings.

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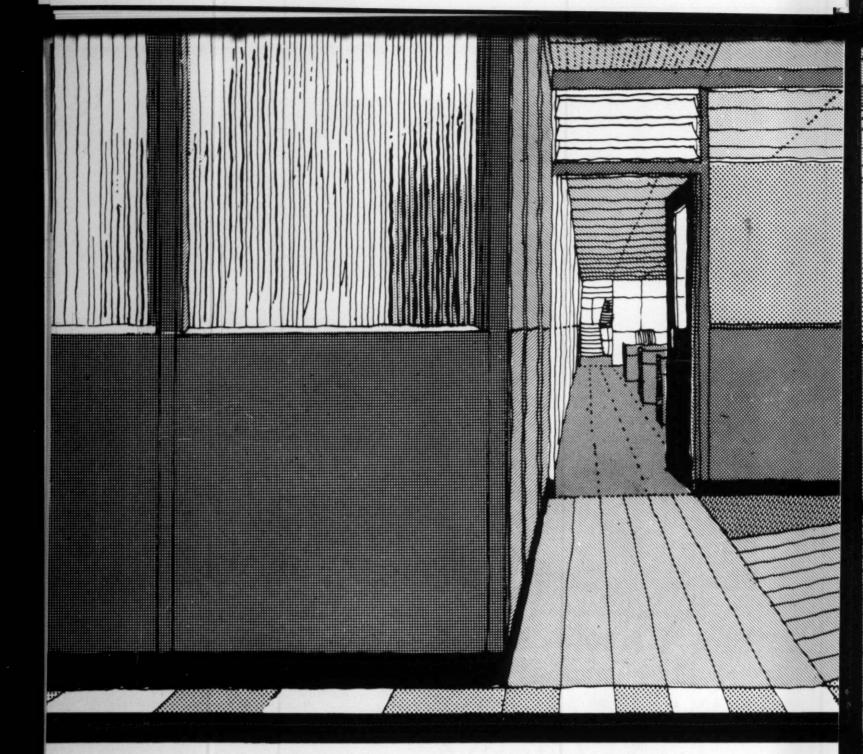


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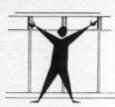


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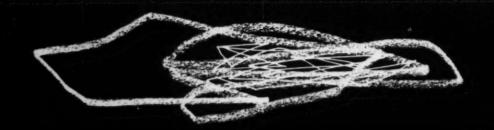
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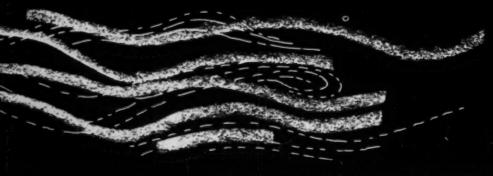
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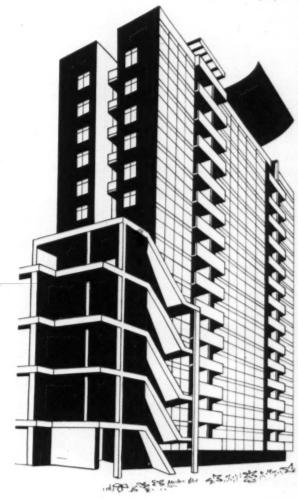
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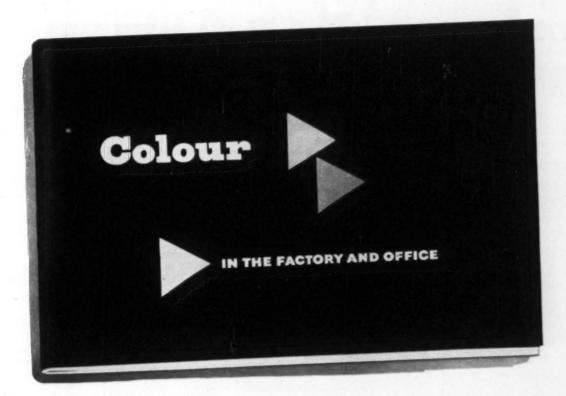




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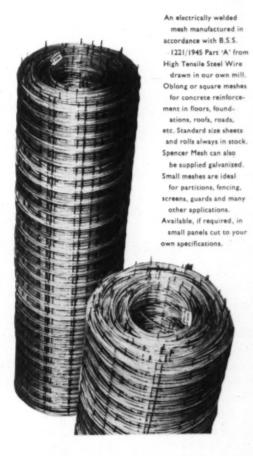
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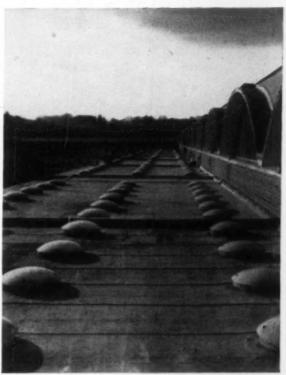


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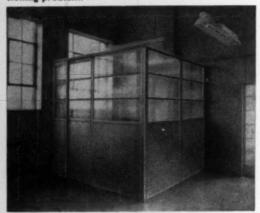
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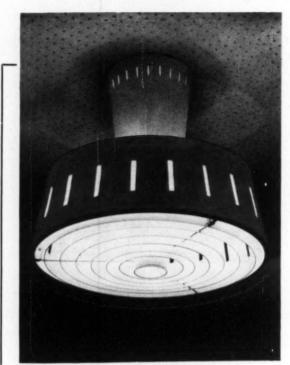
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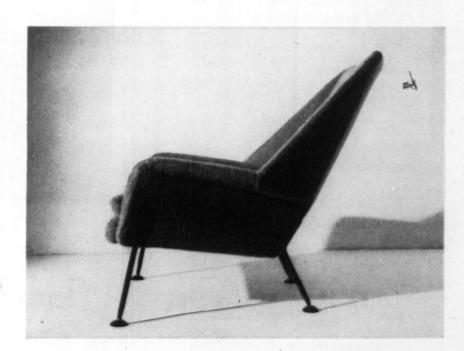
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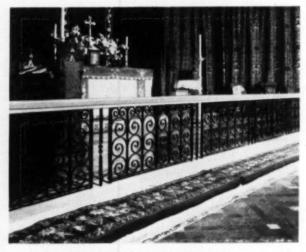
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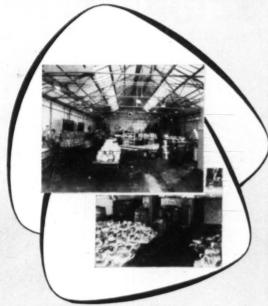
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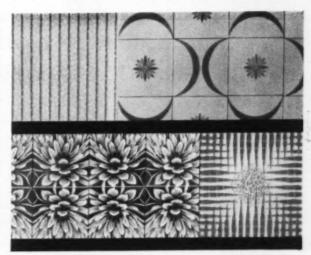
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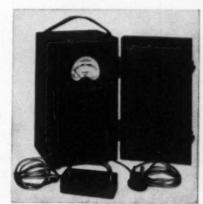
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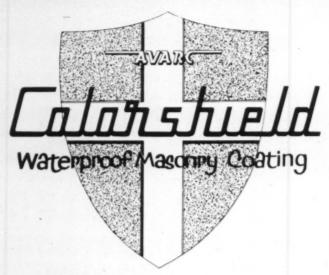
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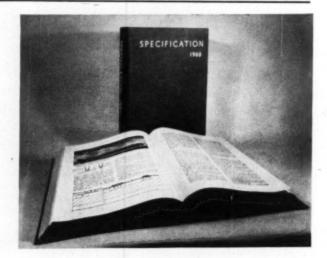
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### SPECIFICATION 1960

Editor, F.R.S. YORKE, F.R.I.B.A.
Assisted by PENELOPE WHITING, A.R.I.B.A.

THE 1960 EDITION of this unique complete guide to the writing of building specifications, long acclaimed as the standard work covering all sections of the building industry, has been scrupulously revised throughout and now runs to 1,520 pages (1,458 in 1959, 1,404 in 1958). Model specification clauses are included in many of the sections, and the general arrangement is that laid down by the British Standards Specification for the sequence of trade headings in specifications.

This year there is one entirely new section, Land-scape Work, by J. St. Bodfan Gruffydd, F.I.L.A., which includes procedure and specification clauses for lawn-making, for shrub and hedge-planting and for tree preservation and pruning. Michael Keyte, A.R.I.B.A., has re-written Lighting (formerly called Illumination) under three main sub-headings: principles of good lighting; methods of calculation; practical techniques. J. B. Screeton, H. S. Froude, and A. O. Williams have rewritten the Painter section. Timber Engineering has been separated from Carpenter and Joiner and forms a separate new section. M. J. Grafton, M.B.E., T.D., has written a sub-section on 'Supermarkets' in the Shops section, and Oliver Leach, A.M.I.C.E., contributes a note and comprehensive table on 'Site Investigation' in Excavator. W. E. J. Budgen, B.S.C., M.I.C.E., has brought Structural Steelwork up to date and E. D. Mills, F.R.I.B.A., has re-written the



Shell Concrete text. Other sections substantially altered and enlarged include: Mason; Roofer; Metal Windows; Plumber; Curtain Walling; Heating Engineer; Ironmonger; Electrical Engineer and Metal Worker; and many new proprietary references are added throughout.

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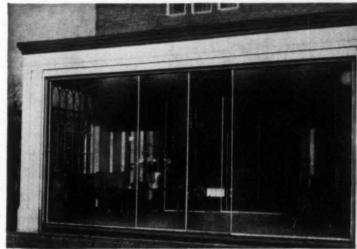
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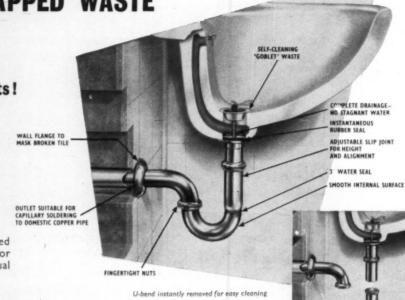
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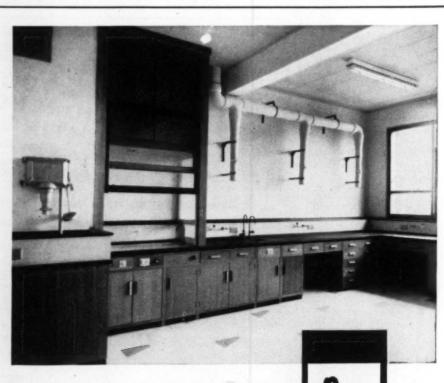
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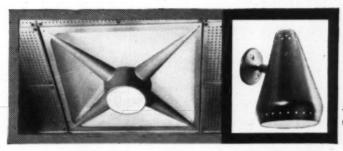
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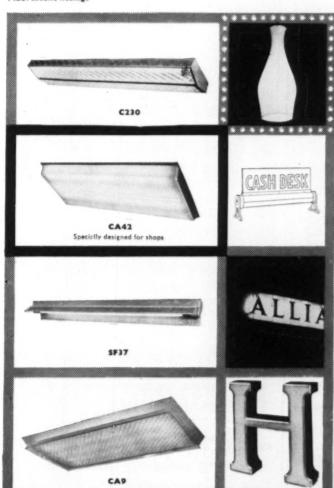
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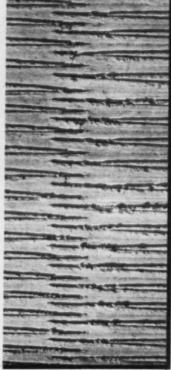
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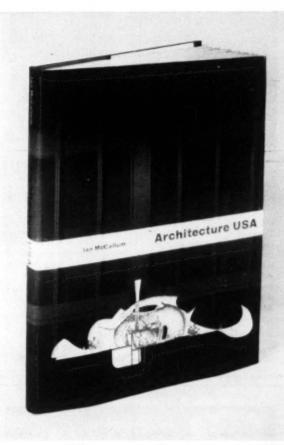
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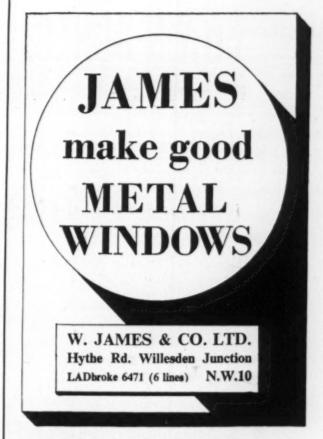


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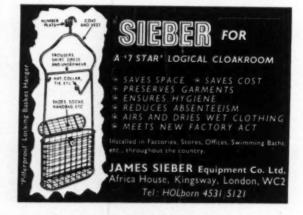
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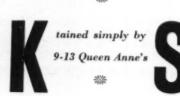
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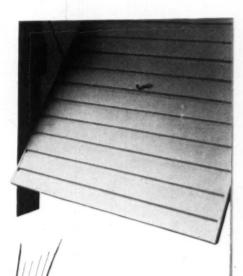
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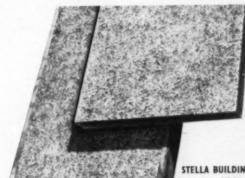
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Air Heating, Ltd. Airscrew Co. & Jicwood, Ltd	***	vii
Alcan (U.K.), Ltd	**** WW	xii, xxxiii
Allied Brick & Tile Works, Ltd	-	cxxiv
Alumin Building Components, Ltd		xlvii
Architectural Press, Ltd., The cxxii, cx	xiv. cx	xix, cxxx
Ascot Gas Water Heaters, Ltd	***	liii
Atlas Lighting Co. Ltd	***	xl
Austin, James, & Sons (Dewsbury), Ltd		lxxxii
Averill, C. R., Ltd		cxxii
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Mowlem, John, & Co. Ltd.	***			li

		PAGE
National Coal Board		
National Coal Board Newalls Insulation Co. Ltd		c, ci xiv
Newalls Insulation Co. Ltd		716
Omnia Constructions, Ltd		lxxii
Develop Coles Ltd		xlv
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Pilkington Bros., Ltd x		iii, lxxxix
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Quicktho Engineering, Ltd		exiii
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Sulzer Bros. (Loudon), Ltd		axev, xxv
Tonks (Riemingham) Itd		XX
Tonks (Birmingham), Ltd Troughton & Young (Lighting),	1.64	lxiv
Tunnel Portland Cement Co. Ltd	L.tu.	Ivi
Tunner Portiana Cement Co. Ltd		101
U.A.M. Plastics, Ltd		lxiii
Vaughan Crane Co. Ltd		Inniv
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Abix (Metal Industries), Ltd cxviii	Engravers Guild, Ltd xxxiv	
Adamser, Ltd iii	Evered & Co. Ltd cxiv	Mowlem, John, & Co. Ltd hv
Air Heating, Ltd cxix		□ National Coal Board c, ci
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Ascot Gas Water Heaters, Ltd.	Gibbons, James, & Co. Ltd lxxxiv	Description Medulais 144
Atlas Lighting Co. Ltd xl	Glazed & Floor Tile Manu-	Powell Duffryn Modulair, Ltd lxxx
Austin, James, & Sons (Dews-	facturers' Association v	Quicktho Engineering, Ltd cxiii
bury), Ltd lxxxii  Averill, C. R., Ltd exxii	☐ Goodlass, Wall & Co. Ltd lxxv	Quicktho Engineering, Ltd cxiii
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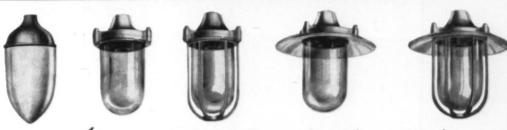
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	cxix	Evered & Co. Ltd	CXIV	□ National Coal Board c, c
Air Heating, Ltd Airscrew Co. & Jicwood, Ltd	vii	☐ Falk Stadelmann & Co. Ltd	xv	FI Massalla Insulation Co. Tall
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	ii, xxxiii			☐ Omnia Constructions, Ltd lxxi
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	lxxi		cxxxi	Sulzer Bros. (London), Ltd xxiv, xxv
Celotex, Ltd	Mary Transaction (1)	M Volestein TAI	cxxi	☐ Tonks (Birmingham), Ltd xx
Central Electricity Generating Board	lxxix	L Rolectric Ltd	CXXI	
Chamberlain Weatherstrips, Ltd.	CXXVIII	☐ Latex Upholstery, Ltd	cxxix	Troughton & Young (Lighting),
Cleveland Art Metal Works	CXXX	PT Total III A T TAI	lvii	Ltd lxiv
Conran Furniture	xci	Leigh, W. & J., Ltd Bay),	****	☐ Tunnel Portland Cement Co. Ltd. lvi
	cxxxiii			CITAM Direction Test
Courtaulds, Ltd	cxii		CXXV	U.A.M. Plastics, Ltd lxiii
Courtney Pope (Electrical), Ltd.	cxxvii	Libraco, Ltd	CXXX	☐ Vaughan Crane Co. Ltd lxxiv
Cox, Williaam J. (Sales), Ltd	cxvii	☐ Lilleshall Co. Ltd	cxvi	
Crane, Ltd	lxxxv	Limmer and Trinidad Lake		Uvetrona Fabrics, Ltd lxix
Crittall Manufacturing Co. Ltd	viii, ix		lxxvii	☐ Victor Products (Wallsend), Ltd. cxxv
Cygnet Joinery, Ltd	cxxvi	Littlewoods Mail Order Stores,		
		Ltd	CXXX	☐ Walker, Crosweller & Co. Ltd lxxiii
Davies, A., & Co. (Shopfitters),		☐ Lytag, Ltd	lxvii	☐ Wall Paper Manufacturers, Ltd. lxviii
Ltd	xxxvi			☐ Warerite, Ltd iv
Dawnays, Ltd	xc	☐ Malkin Tiles (Burslem), Ltd., The	cxxi	☐ Western Counties Brick Co. Ltd. cxx
Demolition & Construction Co.		☐ Mason, Joseph, & Co. Ltd	cii	☐ Westland Engineers, Ltd cxxxi
Ltd., The	xxvii	☐ Matthew Hall & Co. Ltd	li	☐ West's Piling & Construction Co.
Docker Bros	cxv		xlviii	Ltd lxxvi
	3	M.K. Electric, Ltd	xii	☐ Williams, John, of Cardiff, Ltd xviii
☐ Edinburgh Weavers, Ltd	lviii	Morris Rubber Industries, Ltd	cxiv	☐ Williams & Williams, Ltd. xxxviii, xxxix
	xxxvii			Wright Anderson & Co. Ltd lii
				on

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